

**AGRICULTURAL MARKET  
RESEARCH FOR  
MICROFINANCE AND SME  
INTERVENTIONS**

**Final Report**

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## ACRONYMS

<b>Acronym</b>	<b>Full name</b>
<b>AAIDO</b>	Afghan Almond Industry Development Organization
<b>ACTED</b>	Agency for Technical Cooperation and Development
<b>ALDCSP</b>	Agriculture & Livestock Development and Credit Support Program (BRAC)
<b>ADB</b>	Asian Development Bank
<b>ADB</b>	Agriculture Development Bank of Afghanistan (now defunct)
<b>AED</b>	Academy for Educational Development
<b>AFSA</b>	Afghan Farm Service Alliance
<b>AHDP</b>	Animal Health Development Project
<b>AISA</b>	Afghan Investment Support Agency
<b>AIB</b>	Afghanistan International Bank
<b>AKF</b>	Aga Khan Foundation
<b>AKDN</b>	Aga Khan Development Network
<b>ARFC</b>	Afghanistan Rural Finance Company
<b>ARMP</b>	Afghanistan Rural Microcredit Program (AKDN)
<b>ALP</b>	Alternative Livelihoods Project (USAID funded) now ADP
<b>AMA</b>	Afghanistan Microfinance Association
<b>ANDS</b>	Afghanistan National Development Strategy
<b>ANHDO</b>	Afghan Horticulture Development Organization (successor to NUHDA)
<b>ANNGO</b>	Afghan National Nursery Growers' Organisation
<b>AREDP</b>	Afghanistan Rural Enterprise Development Program (MRRD)
<b>ARIES</b>	Agriculture, Rural Investment, and Enterprise Strengthening (USAID Project)

<b>ARMP</b>	Afghanistan Rural Microcredit Program (AKDN)
<b>ASAP</b>	Accelerating Sustainable Agriculture Program (USAID)
<b>ASMED</b>	Afghanistan Small And Medium Enterprise Development (USAID)
<b>AVA</b>	Afghanistan Veterinary Association
<b>BAB</b>	BRAC Afghanistan Bank
<b>BRAC</b>	Bangladesh Rural Advancement Committee (now Building Resources Across Communities)
<b>CDA</b>	Afghanistan Community Development Agriculture
<b>CDC</b>	Community Development Council (promoted by NSP over traditional Shura)
<b>CFA</b>	Child Fund Afghanistan (part of CCF – Christian Children’s Fund)
<b>CHA</b>	Coordination of Humanitarian Assistance
<b>CIDA</b>	Canadian International Development Agency
<b>CIG</b>	Common Interest Group
<b>CNFA</b>	Citizens Network for Foreign Affairs
<b>CSR</b>	Corporate Social Responsibility
<b>DACAAR</b>	Danish Committee for Aid to Afghan Refugees (EC)
<b>DAI</b>	Development Alternatives Inc
<b>DAP</b>	Di-ammonium phosphate (46% fertilizer)
<b>DfID</b>	Department for International Development (UK)
<b>EC</b>	European Commission
<b>EMG</b>	Emerging Markets Group
<b>EPAA</b>	Export Promotion Agency for Afghanistan
<b>FACT</b>	Federation of Afghan Craft and Trades
<b>FAO</b>	Food and Agriculture Organisation of the United Nations
<b>FGD</b>	Focus Group Discussion

<b>FSC</b>	Farmer Service Center
<b>FINCA</b>	Foundation for International Community Assistance
<b>FMFB - A</b>	First Microfinance Bank (AKDN) Afghanistan
<b>GIS</b>	geographic information system
<b>GPFA</b>	Global Partnership for Afghanistan
<b>GTZ</b>	Deutsche Gesellschaft für Technische Zusammenarbeit (German Government)
<b>HACCP</b>	Hazard Analysis Critical Control Points
<b>HLP</b>	Horticulture and Livestock Project (World Bank)
<b>ICT</b>	Information Communications Technology
<b>IDEA</b>	Incentives Driving Economic Alternatives for the North, East, and West – USAID
<b>IFAD</b>	International Fund for Agricultural Development (UN)
<b>IFDC</b>	International Fertilizer Development Corporation
<b>IMF</b>	International Monetary Fund
<b>IRD</b>	International Relief and Development Inc.
<b>Jerib</b>	Afghan measurement of land: 2,000m <sup>2</sup> or 0.4ha
<b>KfW</b>	Kreditanstalt Fur Wiederaufbau (Reconstruction Credit Institute from Frankfurt, Germany)
<b>KRBP</b>	Kunduz River Basin Project (EC)
<b>LO</b>	Loan Officer
<b>Madera</b>	Mission d'Aide au Développement des Economies Rurales
<b>MADRAC</b>	The MFI arm of DACAAR (means 'source' in Dari)
<b>MAIL</b>	Ministry of Agriculture, Irrigation and Livestock
<b>MCI</b>	Mercy Corps International
<b>MEDA</b>	Mennonite Economic Development Associates
<b>MFI</b>	Microfinance Institution

<b>MoIC</b>	Ministry of Industry and Commerce
<b>MRRD</b>	Ministry of Rural Rehabilitation and Development
<b>MIS</b>	Management information system
<b>MISFA</b>	Microfinance Investment Support Facility for Afghanistan
<b>M-Paisa</b>	Afghanistan's first mobile banking product from Roshan (peer-to-peer financial transactions)
<b>NEPA</b>	National Environment Protection Agency
<b>NGA</b>	Nursery Growers' Association
<b>NSP</b>	National Solidarity Program
<b>NUHDA</b>	National Union for Horticulture Development in Afghanistan (now changed to ANHDO)
<b>OSS</b>	Operational self-sufficiency
<b>OXUS</b>	The MFI arm of ACTED
<b>P2K</b>	Paktya, Paktika & Khost Provinces in Afghanistan
<b>PAL</b>	Project for Alternative Livelihoods (EC funded)
<b>PAR</b>	Portfolio at Risk
<b>PEACE</b>	Afghanistan PEACE project (Pastoral Engagement, Adaptation and Capacity Enhancement) – USAID
<b>PESTEL</b>	An analytical model evaluating Political, Economic, Social, Technological, Environmental and Legal factors
<b>PHDC</b>	Perennial Horticulture Development Centre
<b>PHDP</b>	Perennial Horticulture Development Project (EC)
<b>PKSF</b>	Palli Karma-Sahayak Foundation Bangladesh
<b>POS terminal</b>	Point of Sale terminal - a device by which sales transactions can be directly debited to the customer's bank account
<b>PRT</b>	Provincial Reconstruction Team (military)
<b>RAF</b>	Rural and Agricultural Finance
<b>RAMP</b>	Rebuilding Agricultural Markets Program (USAID)

	predecessor to ASAP)
<b>RBSP</b>	Rural Business Support Project (RoP & ADB)
<b>RIMU</b>	Reform Implementation & Management Unit
<b>RoP</b>	Roots of Peace
<b>Ser</b>	Afghan unit of weight: 7kg in Kabul but 14kg in Mazar
<b>SMS</b>	Short Message Service
<b>SME</b>	Small (below 50 employees) and Medium (below 250 employees) Enterprises
<b>SWOT</b>	A planning tool evaluating internal Strengths and Weaknesses and external Opportunities and Threats
<b>TAMAS</b>	A text messaging system for distributing market price information
<b>TORs</b>	Terms of Reference
<b>UAE</b>	United Arab Emirates
<b>USAID</b>	United States Agency for International Development
<b>USDA</b>	United States Department for Agriculture
<b>VCF</b>	Value Chain Finance
<b>VFU</b>	Veterinary Field Unit: a small veterinary office or clinic located in a district to provide animal health care services to the farmers and animals of the nearby villages
<b>VSL</b>	Village Savings and Loans Association
<b>WB</b>	World Bank
<b>WOCCU</b>	World Council of Credit Unions
<b>WUA</b>	Water Users' Association

# AGRICULTURAL MARKET RESEARCH FOR MICROFINANCE AND SME INTERVENTIONS

*Final Report*

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All errors, omissions or misinterpretations in this report are not intentional and remain the responsibility of the consultants. The amount of information collected was vast, but as is often the case with rural studies, sources were often unclear, unsubstantiated, and the detailed context not always clarified. For this reason the report user should be aware of this when quoting or referencing the report.

# AGRICULTURAL MARKET RESEARCH FOR MICROFINANCE AND SME INTERVENTIONS

## *Final Report*

### EXECUTIVE SUMMARY

The microfinance sector in Afghanistan has grown rapidly since its inception in 2003, with increasing numbers of client outreach and an expanding portfolio. Most services are focused in urban centers, specifically in Kabul. On the demand side, most of Afghanistan's population continues to live in rural areas and is active in agriculture and livestock rearing. Thus, there is recognition of the need for a more targeted financial service product and outreach strategy for reaching the vast numbers of poor and very poor Afghans living in rural areas.

The Microfinance Investment Support Facility for Afghanistan (MISFA) was established in 2003 at the invitation of the Afghan government — to encourage optimal donor coordination and use of resources for the sector. Recently, the Board and management of MISFA have decided to devote strategic effort and support to the development and strengthening of the rural and agricultural economy of Afghanistan.

This study was commissioned by MISFA to support its efforts in identifying gaps and opportunities in the rural finance sector, and to offer guidance on how MISFA might best deploy and organize staff and resources to achieve the objective of increasing access to rural and agricultural finance through their partner MFIs and other financial institutions. The focus of the study was on Balkh and Kunduz Provinces, selected by MISFA. Primary tasks were as follows:

- Task I: Conduct high level value chain assessments with a 'financial lens' with emphasis on the need for credit and other financial products in the value chains
- Task II: Conduct a financial sector market assessment to gauge MFI partners' capacities to serve the targeted value chain actors and service providers with appropriate financial services
- Task III: Provide recommendations for MISFA on potential financial solutions that would assist to overcome critical constraints in the value chains

The study consisted of numerous interviews, conversations, and meetings with stakeholders in the agricultural sector, including the following groups of stakeholders:

- Value chain actors (Farmers, producers, processors, traders, input suppliers and agribusiness actors) to understand the value chain relationships and challenges
- MISFA financial sector partners (microfinance institutions, commercial banks, NGOs) to understand agricultural and livestock lending issues
- Agriculture sector stakeholders (government, projects, donors, NGOs) to hear their perspectives and issues through a macro lens

### Overview of the Report

The first component (sections 1, 2, 3, and 4) of the report presents an introduction to the study, its objectives, and methodology, as well as an introduction to rural finance terminology.

The second component of the report (sections 5, 6, and 7) presents general findings and observations from the research as a whole (rather than value chain specific) in three main areas: the Afghan agricultural sector, the Afghan financial sector (with emphasis on rural finance), and third party stakeholders in the agricultural sector.

Section 8 of the report contains the observations and analysis from the value chain assessments conducted for seven distinct value chains: Almond, Melon, Wheat, Rice, Sesame, Dairy, and Sheep. Each value chain assessment includes a value chain map, a table of key observations by actor / value chain component, and critical analysis of financing gaps in the value chain.

The final section (9) presents analysis and recommendations to MISFA on options for advancing rural finance in Afghanistan and building capacity for value chain finance and rural finance in its Afghan institution partners.

## **Key Findings, Opportunities and Recommendations**

Agriculture and agri-business are the backbone of Afghanistan's economy and its economic development strategy. Forty to fifty years ago, Afghanistan was a strong player in the world dried fruit and nut market. Years of war and instability have destroyed national infrastructure, agricultural producers and processors. However, agriculture and livestock are still the primary economic activities in rural Afghanistan. Today, agricultural production, agri-business and agri-processing are growing dramatically, with intervening support from many government and donor projects.

The typical Afghan farm is a diversified agricultural activity that is managed on a subsistence basis, farmed manually with little mechanization or specialization, limited by capital and liquidity, and averse to both risk and debt. Reconstructed irrigation systems and roads, improved legal and regulatory frameworks and increasing telecommunications access are building a conducive environment for increased agricultural production.

The sector is constrained by liquidity, access to appropriate financing, and long term investments necessary for commercial, market-oriented participation in a global economy.

The microfinance sector in Afghanistan is still in a rather nascent stage, with most institutions having been launched as recently as 2004 or 2005. MISFA currently works with 16 partner MFIs, who represent outreach of over 440,000 clients and a total portfolio of over USD 100 million, about 30% of which is classified as rural<sup>1</sup>.

However, rural reach in financial services has also been limited by most service providers in the sector. Rural financial services are expensive and risky to deliver, and as a result interest rates are prohibitive for many farmers and many service providers simply avoid working in rural areas. In order to serve the rural population (and agricultural and livestock activities in particular) successfully, MFIs must look at managing their service delivery costs, particularly through partnerships, innovative loan products and technology.

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<sup>1</sup> MISFA. "MF Sector Update January 2009." January 2009.

SME finance demand is significant and lending to this segment is slowly taking off, particularly in the agribusiness sector. There are 17 commercial banks in Afghanistan but all are risk averse – currently only offering construction and trade credit – and very little agriculture or agribusiness credit.<sup>2</sup> Very few are willing to consider agribusinesses. MISFA has initiated work with banks and its microfinance partners in developing SME financing products and services. This activity, launched in 2006, partners with relatively few institutions as yet, and its scale is still very low relative to demand. The focus has been to build quality capacity gradually, and also handle the challenges of working with the regulatory framework, the environment, and the formal banking sector before growing rapidly.

The primary issue in rural and agricultural finance is that a comprehensive, integrated approach is required for effective financing interventions. Crop-specific value chains are one way of evaluating potential for finance to smallholders, but should probably not be exclusively used to evaluate financing opportunities in an environment where household activities are highly diversified and specialization is uncommon. Microfinance to small-scale producers or very small traders may not be effective or useful if there are also constraints and financing barriers for processors or traders who are vital to the value chain. Financing interventions that focus exclusively on SMEs, and that do not consider the product needs of end consumers or the constraints facing farmers or producers will also be ineffective, and may in the end prove to be a high credit risk.

While there is value in focus and specialization in financial service delivery, it can also become a weakness if the needs of SMEs and those of the farmers or end consumers are perceived to be mutually exclusive.

This study identified two types of opportunities to increase access to micro- and SME agricultural finance: 1) general opportunities, which highlight general micro and SME rural and agricultural financing needs that are applicable sector-wide and 2) value chain specific financing opportunities, which point to specific financing needs along a high-potential value chain where the value chain relationships could be leveraged to reduce risk or transaction costs for the lender.

### **1. Build MISFA's Internal Capacity for Agricultural and Value Chain Finance**

The current value chain development, agricultural activities and interventions in Afghanistan are all constrained by the liquidity and long term investment gaps in the chains. Demand for appropriate financing is high and continues to grow. However, agricultural and value chain financing is distinct from traditional microfinance and requires different techniques, approaches and service delivery.

MISFA should build its internal knowledge, awareness, personnel skills development and capacity in rural and agricultural finance for both micro and SME finance service delivery. The lines between the microfinance and SME departments need to be blurred in order to foster greater synergies and coordination needed in the sector.

### **2. Capitalize MISFA as Coordinator and Knowledge Centre for Agricultural and Value Chain Finance**

Given Afghanistan's government strategy for economic growth through agriculture (Master Plan for Agriculture), many international donors are concurrently providing significant support to the

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<sup>2</sup> Interview with Ahmad Javaid Zeerak, AREDP, May 25, 2009

sector. The potential unintended effects of uncoordinated assistance and projects in the sector (such as market distortion or misplaced incentives) should not be underestimated nor ignored.

Despite the risks inherent in lending for agricultural activities, there is great potential to develop strategic alliances between SME and microfinance lenders and other agricultural support activities. These alliances do not alleviate the MFI or bank's responsibility to conduct necessary due diligence, but they offer another avenue of risk management and ensure coordination between financial and non-financial support services.

MISFA should position itself as a key partnership broker for dialogue, coordination, priority-setting, and strategy development for rural and agricultural finance and value chain finance linkages in Afghanistan. MISFA should play a critical role in building successful linkages that benefit the financial institutions, the agricultural sector / value chains, and the businesses and farmers operating in the sector.

MISFA should also appoint a Business Development / Linkages Coordinator, who would be responsible for developing linkages and contacts between processors, producers, associations, projects, banks and microfinance service providers.

### ***3. Build MISFA MFI Partners' Capacity for Agriculture and Value Chain MicroFinance***

This study also realized that there is a strong need for MFIs to develop appropriate loan products -- tenure, service fees and repayment frequencies that make sense for the farm business and its cash flows. Without them, the farm business will be unable to cover the loan expectations, and poorly designed credit products will actually lead to defaults in agricultural and livestock portfolios in microfinance and SME lending institutions. Building capacity in all areas of MFI management, including credit management and developing market-led services -- particularly for agriculture -- is an important investment.

MISFA should provide support and capacity building (directly or indirectly) to partner MFIs on product development for agricultural finance. This would include support in systematic planning and testing of appropriate generalized agriculture loan products for producers as well as agribusiness loans to small enterprises engages in trading or processing activities. It could also include MFI product offering expanding to larger loans, serving larger businesses. Another area of new product development of potential value is appropriate loans for established producer groups to enable investment by the group for storage or other local processing investments for the benefit of group members.

### ***4. Build Capacity of SME Lenders in Agriculture and Value Chain Finance***

The SME sector, particularly in agri-business, is experiencing very high private investment and growth in Afghanistan. SME finance is in huge demand. The severe lack of access to capital for SME investments or working capital was a constraint in nearly all of the value chains examined.

MISFA should provide support and capacity building to its SME lending partners to offer appropriate products to agribusinesses, agri-processing firms, and larger farmers, including commercial farming activities. Part of this support should focus on appropriate institutional-level risk management approaches to agricultural portfolios. SMEs may also need support themselves in becoming 'credit-ready' with business planning and other support services. Where institutions continue to be risk-averse to agribusiness lending, MISFA should consider incentives, credit enhancements, or risk-sharing arrangements that would make the sector more attractive to SME lenders.

## **5. Support MFI and SME Partners in Managing Change and Technology for Innovations in Service Delivery**

In general, MFI institutional and technical capacity has been weak in the nascent Afghan sector, although there are signs of change. Preparing for growth, rural expansion, developing and offering a range of products that require a variety of skills, and increasing use of technology in business processes are all operational issues that require careful planning, sound leadership and strong change management skills.

MISFA should continue to provide support to MFI and SME partners in change management during this period of consolidation and controlled growth. This includes ongoing coordination and support to the testing and development of mobile phone m-Paisa applications – as they become available in various areas -- and strengthening management information systems and other technology in order to reduce transaction costs, particularly to rural Afghanistan.

## **6. Lead the Piloting of a Crop-specific Value Chain Finance Linkage**

Microfinance to small-scale producers or very small traders may not be effective or useful if there are also constraints and financing barriers for processors or traders who are vital to the value chain. Financing interventions that focus exclusively on SMEs, and that do not consider the product needs of end consumers or the constraints facing farmers or producers will also be ineffective, and may in the end prove to be a high credit risk.

Crop-specific value chains are one way of evaluating potential for finance to smallholders, but should not be used exclusively to evaluate financing opportunities in an environment where household activities are highly diversified and specialization is uncommon. However, the primary issue in rural and agricultural finance is that a comprehensive, integrated approach is required for effective financing interventions.

Value chain financing gaps were evident in all of the value chains studied. The Consultants evaluated the potential of each chain from the point of view of both income generation and market potential. Based on these factors, several of the financing opportunities looked most promising from a risk management and financing viewpoint:

- Almond value chain: Long-term financing for farmers to replant orchards; SME financing for construction of warehouse and packing facilities; SME investment and financing for processing facilities.
- Rice value chain: Financing producer associations for construction of storage facilities for rice to avoid seasonal losses or fire sales; financing to agri-processors so that they can finance working capital of their affiliated producers; investigate potential for a warehouse receipts system.
- Sesame value chain: financing for SME processors / packaging firms; SME financing for warehouse facilities; working capital finance for small producers.
- Sheep value chain: appropriate microfinance loan products for sheep rearing for small producers; appropriate financing products (micro- or SME) for by-product business activities of sheep production (wool, butchers, carpet-weaving, tanning, leather, etc).
- Wheat value chain: working with the flour mill in Mazar to develop contract farming that includes a financing component with up to 10,000 farmers.

MISFA should consider supporting the development of a specific value-chain financing initiative in one or more of the above sectors. It would be an ideal opportunity to explore the evolving needs, challenges and potential of working within a sector approach.

## **Conclusions**

This study highlighted a number of constraints in the inputs, production, processing and marketing sectors for selected agricultural value chains, always keeping a focus on the implications and opportunities for microfinance institutions and MISFA to facilitate increased access to finance in the agricultural sector. The challenges when approaching value chain development and/or financing are complex, and solutions will need to involve integrated approaches involving partners or strategic alliances, rather than stand-alone interventions.

The study recommended that the Afghan microfinance sector still needs strong technical support in loan product development, management, governance, credit delivery, MIS systems, internal audits and controls. Capacity building at all staff levels is also a priority in order to keep institutions on a solid footing for good credit management. The study also highlighted the opportunity for lending to the SME agri-business sector, particularly for processors, storage facilities and export or growers associations.

Given the dual objectives of incorporating poor producers as well as focusing on market preferences, the interventions should be both commercially viable and development-focused. It is also important to recognize the many ongoing agricultural projects, activities and interventions by numerous donor-funded initiatives, and the effects of these on markets, producer behavior, and businesses (both positive and negative).

In conclusion, the timing seems ideal for MISFA to take the lead on supporting the expansion of access to rural finance in Afghanistan. There is an overwhelming amount of information and number of players in the sector (the level of data collected in this short study is proof enough of that), but by being strategic about the support to partners as well as identifying its niche in the sector, MISFA will be able to leverage its own resources and that of external partners for maximum benefits to the agricultural and financial sectors as well as to their ultimate clients – the people of Afghanistan.

## 1.0 INTRODUCTION

The Microfinance Investment Support Facility for Afghanistan (MISFA) was set up in 2003 at the invitation of the Afghan government — to get donor coordination right from the start and avoid the counter-productive efforts that have emerged from conflicting donor objectives in other post-conflict situations. It was established as a vehicle through which the Afghan government and international donors could channel technical assistance and funding to build Afghanistan's microfinance sector, though more recently this mandate was expanded to include the lower ranges of small and medium enterprises (SME) lending.

The microfinance sector in Afghanistan has grown quite rapidly in the last few years since its inception in 2003, with increasing client and outreach and expanding portfolio size. Most services are focused in urban centers, specifically in Kabul. On the client side, most of Afghanistan's population continues to live in rural areas and is active in agriculture and livestock rearing. Thus as impressive though the growth figures are, there is recognition of the need for a more targeted product and outreach strategy for reaching the vast numbers of poor and very poor Afghans living in rural areas.

Strategically, the Board and management of MISFA decided to devote effort and support to the development and strengthening of the rural and agricultural economy of Afghanistan. MISFA's focus on the agri-sector is in alignment with the national Master Plan for Agriculture, a planning document developed by and for the Government of Afghanistan in 2005<sup>3</sup>.

*“Agriculture dominates the Afghan economy and society. [...] [I]n Afghanistan, because of the nature of the resource base and its impact on comparative advantage, [the development of the] manufacturing and service sector[s] will be heavily dependent on agriculture. More important, even as its relative importance declines rapidly with economic growth, agriculture will increase immensely in absolute size and be the basic engine for the transformation of the economy and even more so for poverty reduction and poppy eradication. The Master Plan provides a road map for accelerating this engine and the consequent transformation of the economy.”<sup>4</sup>*

This study was assigned to support MISFA in identifying gaps and opportunities in the rural finance sector, and offer guidance on how they might best use resources to achieve the objective of increasing access to rural and agricultural finance through their partner MFIs and other financial institutions. The focus of the study was on Balkh and Kunduz Provinces. Primary tasks were as follows:

- Task I: Value chain assessments with a 'financial lens' – Conduct high-level value chain assessments of 2-4 agricultural value chains with particular emphasis on the need for credit and other financial products in order to promote upgrading of the chains or increased participation and profitability of small producers / enterprises. The primary actors of interest in the VC are small and medium scale producers and enterprises.

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<sup>3</sup> Master Plan for Agriculture, pg 2. Government of Afghanistan, 2006.

<sup>4</sup> Master Plan for Agriculture, pg 2. Government of Afghanistan, 2006

- Task II: Financial sector market assessment – Survey and analysis of existing MFI and Bank products, infrastructure, interests, and capacities to serve the targeted value chain actors and service providers (especially small producers and enterprises) with appropriate financial services to improve production capacity or promote value chain strengthening. The analysis will consider the specific challenges and needs of the value chains identified in Task I of the project;
- Task III: Recommendations for financial services interventions – Based on the findings of Tasks I & II present recommendations for MISFA on the potential financial solutions that would assist to overcome critical financing / production constraints in the targeted value chains.

The Consultants conducted a field study and market research through a series of meetings, interviews, and discussions with three main groups of stakeholders:

- Value chain actors (Farmers, producers, processors, traders, input suppliers and agribusiness actors) to understand the value chain relationships and challenges
- MISFA partners (microfinance institutions, commercial banks, NGOs) to understand agricultural and livestock lending issues
- Agriculture sector stakeholders (government, projects, donors, NGOs) to hear their perspectives and issues through a macro lens

The full Terms of Reference is found in **Appendix 1**. Section 4 provides a full description of the research methodology as well as a list of all interviews conducted.

## 2.0 SCOPE AND APPROACH

Numerous surveys, studies and research assignments in rural and agricultural developments have been conducted. The bibliography includes some of the resources accessed during the period of the study; most are available on public websites.

However, the approach taken by the Consultants was to take the “bottom-up” perspective. We talked to farmers first to understand their needs, issues, and challenges in farming. We also spoke to fertilizer dealers, veterinarian shop-keepers, and market traders in an effort to understand the local agribusiness sector at the ground level.

Secondly, the Consultants looked at the issues from a demand-side approach to credit and financing – rather than the supply side. Credit – in simple concepts – is debt to the individual or business, and should be minimized in many cases, but leveraged to optimize business opportunities that emerge. We focused on understanding the existing commercial flows and linkages in the agricultural sector first, and the challenges commonly faced by the farmer. The cash flow of the farm activities were evaluated, including traditional means of saving and borrowing.

The mandate of the assignment was to focus on a number of specific agricultural value chains, and the work, analysis, report and related appendices fulfill that specific expectation. However, it was fairly obvious early in the study that the vast majority of common smallholder farmers produce a variety of crops, grains and livestock on “mixed farms”. The majority of farmers do not farm commercially by specialization or thinking about specific value chains.

Therefore, many of the recommendations for financial interventions and support to the sector look at the farm as an integrated unit of production, and not one specific value chain.

Rural and agricultural development is definitely the “flavor of the year” for Afghanistan and donor support. The Master Plan for Agriculture developed by the Ministry of Agriculture, Irrigation and Livestock in 2005 highlights the multiple roles of agriculture, including food security, earning foreign exchange through export markets and its domination by the private sector, to name a few. Donor and government initiatives in the agricultural sector are numerous and the level of financial support astounding.

**Daily Outlook Afghanistan**  
**June 10, 2009**

**France to Provide 15m for MAIL, NSP Projects**

“The government of France will provide 15.1 million for supporting a one-year agricultural scheme and other projects under the National Solidarity Programme (NSP) – a flagship project of the Afghan government.

A memorandum of understanding (MoU) to the effect was signed between the Ministry of Agriculture, Irrigation & Livestock (MAIL), Ministry of Finance (MoF) and Agency France development (AFD) here on Tuesday.

The project is aimed at sustainable improvement in food security, agricultural productivity and income generation in Nijrab, Tagab and Alasai districts of Kapisa province and Sorobi district of Kabul.

As part of the project, the capacity of MAIL offices will be enhanced in project management; planning, implementation, monitoring and reporting. The amount will be spent in the areas of beekeeping, poultry, fish farming, fruit nurseries, storage facilities, distribution of seed and fertilizer and important rural infrastructure projects.....

Under the programme, reconstruction schemes including small dams, roads and power supply are on in 359 districts in the country. With 10 percent of the project cost paid by area residents, such schemes are prioritized by community development councils.

Deputy Minister of Agriculture, Irrigation and Livestock Salem Kunduzi explained the amount allocated to his ministry would be spent on various projects such as fertilizers, improved seeds, beekeeping and poultry farming.”

(Pajhwok)

### **3.0 RURAL AND AGRICULTURAL FINANCE DEFINITIONS**

Rural and agricultural finance is broader than the typical concepts of the microfinance paradigm. The following terms and definitions form a basis for discussion in this report, and attempt to dispel conceptual misunderstanding. A more extensive list of Commonly Used Terms in Rural and Agricultural Finance is located in **Appendix 2**.

**Box. The spectrum of financial services**

*Formal or semi-formal financial services:* These are the financial services provided by institutions regulated by state or local government in a particular country. This includes banks, credit unions, microfinance banks, financial cooperatives and possibly leasing or finance companies. Many of the semi-formal financial services

are provided by microfinance institutions, NGOs, community based organizations, etc.

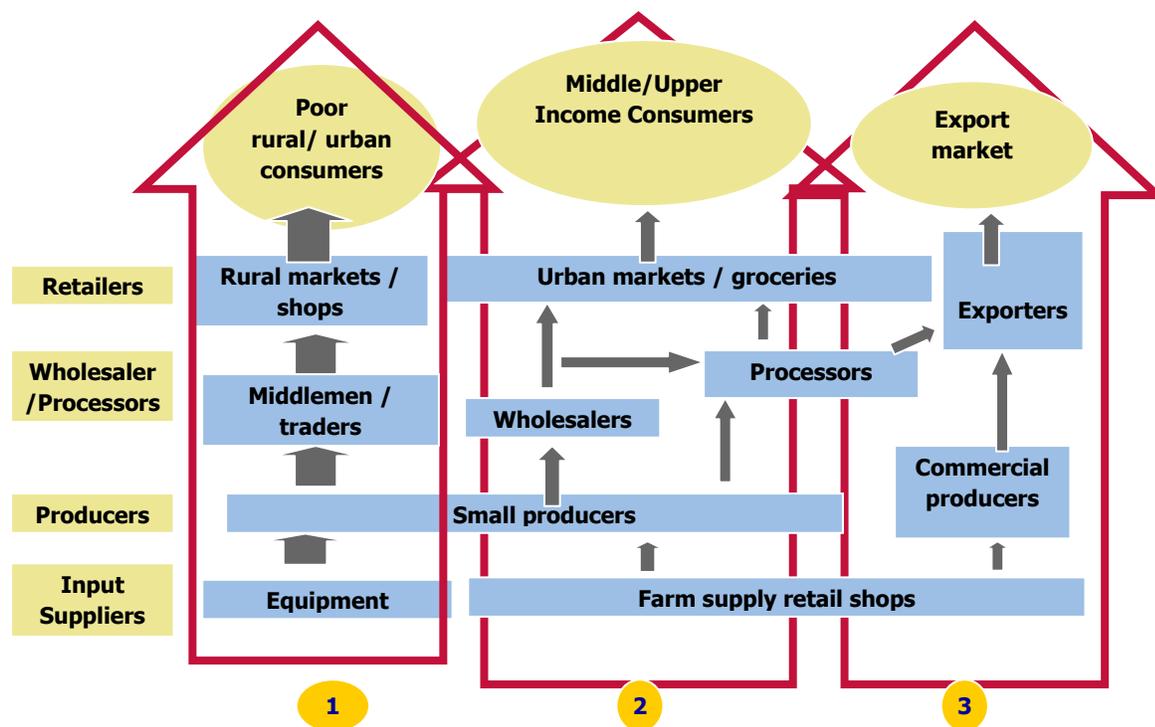
*Informal financial services:* These services are provided by individuals not registered or regulated with any authority, usually without written contracts between the parties. This includes family, friends, moneylenders, savings clubs / groups, or village savings and loans associations.

*Loan characteristics:* interest rate (monthly or annual, flat or declining); term (no. of months), repayment schedule (frequency, interest/principal), grace period, collateral requirements (fixed or movable assets, guarantor, group guarantee, etc.).

- **Microfinance:** Microfinance is described as financial services – savings, credit, remittances, leasing and insurance – for poor and low-income people. Microfinance has traditionally been offered in urban communities. Since its characteristics are appropriate for retail shop keepers, kiosks and many small scale services, it is often thought inappropriate for agriculture or agribusinesses.
- **Rural Finance:** These are financial services needed in rural areas by people of all income levels and include individuals and businesses in rural areas and in small urban areas of provinces.
- **Agricultural finance:** This refers to financing for agriculture – and related activities, from production and processing to market.
- **Value Chain:** The chain of activities that transforms a product or service from an idea or a raw form to a product (adds value) to reach a distinct consumer market.
- **Value Chain Finance:** describes the financial services and credit that flow from one actor to another in the value chain, often as an embedded service. It may also include finance from a financial institution to a value chain actor directly.

In broad terms, a generic agricultural value chain is usually illustrated as follows:

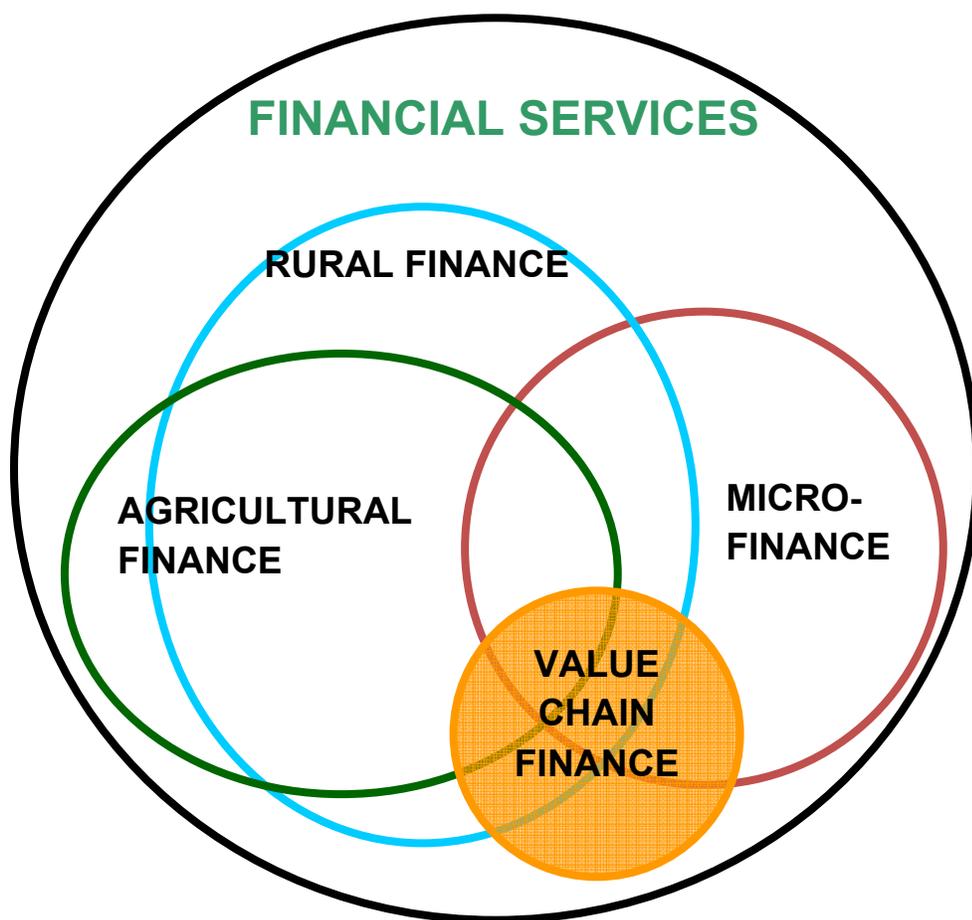
Figure 1: Generic Agricultural Value Chain



In reviewing these definitions and the above illustration, it follows that in the topic of rural and agricultural finance, we are not approaching finance from a specific target group perspective (e.g., rural finance) or type of finance (e.g., microfinance). Rather we are looking at a number of actors in the value chain of various crops and produce and all types of financing.

The result is that we need a **paradigm shift** from traditional microfinance when addressing rural and agricultural finance, particularly through the lens of value chains. The figure below illustrates the intersection of the various types of financial services. Value chain finance is overlaid at the intersection of microfinance, agricultural finance and rural finance.

Figure 2: Types of Financial Services



#### 4.0 METHODOLOGY

The study consisted of numerous interviews, conversations, and meetings with stakeholders in the agricultural sector, first and foremost farmers themselves. Some interviews and focus group discussion were conducted simultaneously. **Appendix 3** includes the List of Persons Interviewed. Our interview guide of questions for discussion is found in **Appendix 4** and was generally followed to ensure consistency and completeness of information from farmers and traders/processors.

As already stated, the interviews were focused at the input level (suppliers, supporting services, financial services, and government and project stakeholders) and processor level, with no interviews or research conducted at the "Output Level" of the value chain. This is the level that looks at consumers and customers (domestic or export) and the retailers serving those consumers. This omission has put some limitations in the understanding of product demand and value chain potential in later sections. However, anecdotal information was collected in conversations with traders, wholesalers, project staff, etc. in order to help prioritize sectors for more in-depth analysis.

Table 1: Who We Talked To

Value Chain Level	Actor type	Interviewees
<b>Output Level</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<b>Processor/Trader Level</b>	<ul style="list-style-type: none"> <li>• Processors – small and medium</li> </ul>	<ul style="list-style-type: none"> <li>• 1 ice cream factory (Mazar)</li> <li>• 1 small fresh juice shop (Mazar)</li> <li>• 1 cotton seed oil seed factory (Mazar)</li> <li>• 1 sesame seed oil seed factory (Balkh)</li> <li>• 1 oil seed factory owner (Kunduz)</li> <li>• 1 flour mill factory (a second flour mill refused us entry) (Mazar)</li> <li>• 1 rice processing factory (Kunduz)</li> <li>• 1 poultry hatchery and feed mill (Mazar)</li> <li>• 2 milk dairies (a third milk dairy refused us entry) (Mazar and Kunduz)</li> </ul>
<b>Processor/Trader Level</b>	<ul style="list-style-type: none"> <li>• Market traders – retail, wholesale</li> </ul>	<ul style="list-style-type: none"> <li>• 2 wheat traders (Mazar)</li> <li>• 1 wheat purchasing agent (Kunduz)</li> <li>• 2 almond traders (Kunduz)</li> <li>• 4 melon and fruit traders, (Mazar, Kunduz and Kabul)</li> <li>• 1 auctioneer (Kabul)</li> </ul>
<b>Producer Level</b>	<ul style="list-style-type: none"> <li>• Farmers</li> </ul>	<ul style="list-style-type: none"> <li>• 12 focus group discussions with farmers (approximately 151 farmers) – (in Mazar, Khulm, Kunduz)</li> <li>• 2 of these focus group discussions were with a total of 22 women; these women conducted a variety of activities such as carpet weaving and livestock</li> <li>• 30 farmers (Mazar, Balkh Samangan and Kunduz) from within the focus groups were interviewed individually to get additional information</li> </ul>
<b>Input Level</b>	<ul style="list-style-type: none"> <li>• Input suppliers</li> </ul>	<ul style="list-style-type: none"> <li>• 3 fertilizer shop keepers (Mazar and Balkh)</li> <li>• 1 transporter (Kabul)</li> <li>• 2 market seed shops (Balkh)</li> </ul>
<b>Input Level</b>	<ul style="list-style-type: none"> <li>• Equipment dealer</li> </ul>	<ul style="list-style-type: none"> <li>• 1 market trader for small tools (Balkh)</li> <li>• 1 spare parts dealer (Kunduz)</li> <li>• 1 equipment and tractor importer (Kunduz)</li> </ul>

<b>Service provider</b>	<ul style="list-style-type: none"> <li>• Veterinarian shops</li> </ul>	<ul style="list-style-type: none"> <li>• 2 veterinarian shops (Mazar)</li> </ul>
<b>Service provider</b>	<ul style="list-style-type: none"> <li>• Sector stakeholders – government ministries, agricultural extension and support projects</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Rural Rehabilitation and Development (Afghanistan Rural Enterprise Development Fund – SME Grant Fund)</li> <li>• Ministry of Agriculture, Irrigation and Livestock</li> <li>• Numerous projects listed in <b>Appendix 3</b></li> </ul>
<b>Service provider</b>	<ul style="list-style-type: none"> <li>• Microfinance institutions and banks offering SME loans</li> </ul>	<ul style="list-style-type: none"> <li>• BRAC (Kabul and Mazar)</li> <li>• FMFB (and ARMP) (Kabul, Mazar, Balkh and Kunduz)</li> <li>• FINCA (Kabul)</li> <li>• CFA International (Kunduz)</li> <li>• ARFC (Kabul)</li> <li>• WOCCU (Mazar)</li> </ul>
<b>Service provider</b>	<ul style="list-style-type: none"> <li>• ICT Provider</li> </ul>	<ul style="list-style-type: none"> <li>• ROSHAN and its wholly owned subsidiary m-Paisa (CRS division of Roshan) (Kabul)</li> </ul>

## 5.0 FINDINGS AND OBSERVATIONS OF THE AGRICULTURAL SECTOR

### 5.1 Current Afghanistan Rural Agricultural Context

- Afghanistan is dominated by rugged, mainly barren mountains. More than 49 percent of the total land area lies above 2,000 meters. The Hindu Kush mountain system is the western extension of the Pamir Mountains, the Karakorum Mountains and the Himalaya Mountain ranges. The system cuts across the country from north-east to south-west.
- The country's climate is typical of an arid or semiarid steppe, with cold winters and dry summers. Summer temperatures vary significantly between day and night, creating an ideal environment for fruit maturation, nuts, and other short-term horticultural crops.
- Afghanistan has undergone drought in the recent 5 years, but the drought of 2008 was particularly severe in the north. Food prices increased dramatically as there was a shortage of supply. Estimates are that up to 50% of the livestock herd was decimated.
- There is significant – but generally uncoordinated – investment and intervention in the agricultural and agri-processing sector, including the development of producer

associations, strengthening extension services, and strengthening commercial input supply chains.

- It is estimated that 80% of Afghanistan's population resides in rural areas. Many of those will be in villages and small towns no doubt.
- In general, long term investment in agriculture or agribusiness is not prioritized. The vast majority of projects and donor investments (EU exempt) are very, very short term in nature – 2-3 years. Re-investment in rebuilding orchards is generally not prioritized because the immediate priority is food security and economic security through short term crops and cereals (part of the poppy eradication strategy).
- Afghanistan lost its place in the world market for many of its exports during the wars of the past three decades. World agriculture and trade has changed dramatically since that time, and it may be difficult to regain its early position. Export markets are emerging again (e.g. pistachios, walnuts, almonds, grapes/raisins, pomegranates, karakul, carpets, saffron, rose oil), but there are many challenges, e.g. product quality, transportation, and storage.

## **5.2 Afghanistan Infrastructure**

- Afghan roads and bridges to major centers and major roadways to other countries in the region have undergone major reconstruction since 2002 and the fall of the Taliban. Improved access to Tajikistan, Pakistan and soon India and Iran is beginning to facilitate trade and movement of goods and supplies within the country and to its neighbors.
- Afghanistan boasts a strong mobile phone network, with four competing ICT providers. ROSHAN (of the Aga Khan Group) has 6.7 million subscribers and network coverage of over 54% of the country. However, there are rural remote areas that still have less than 10% coverage.
- ROSHAN's wholly owned subsidiary m-Paisa is the Corporate Social Responsibility arm of the telecommunications provider. M-Paisa is a peer-to-peer (and hopefully a person-to-bank one day) money transfer system using mobile phones as the conduit or vehicle for transfer. Their strategy is to expand rural coverage and access in Afghanistan "one community at a time." ROSHAN is actively and systematically rolling out m-Paisa to the country's rural poor, conducting a number of pilot programs with banks and MFIs, and is strategically committed to long term investment in telecommunications and rural financial services in the country. However, wide-spread rural access and uptake to m-Paisa facilities are not realistically expected in the short-term.
- The agribusiness processing sector was also decimated during the war, both private, commercial enterprises and Soviet-established factories and processors. Major recapitalization and rebuilding of the agribusiness sector is still underway. Current agri-processing activities and investments in the sector are very nascent. However, many Afghan investors who were out of the country for decades are returning and looking for business partnership opportunities.

### 5.3 Afghanistan Macroeconomic, Legal and Regulatory Framework

- The formal banking sector provides little SME or large bank credit to the agri-sector; there are many banks in the country but only a very few engage in commercial lending. Traders and construction businesses are favored and considered relatively risk free.
- Inflation rate figures vary depending on the website and approaches taken. The IMF published a 5% inflation rate in the 2006/2007 year (March fiscal year end), to over 20% in the 2007/2008 year, largely because of an increase in commodity prices (drought related). It is predicted to fall to 6% again. Other estimates for the consumer inflation rate quote 16.3% in 2007 and 13% in 2008<sup>5</sup> with a majority of the country's revenue coming from foreign government donations.
- Growth rates estimated by the IMF were about 10% in 2007 and 2008 and dropped to 3.5 % in the 2008/2009 due to the drought.
- The “hawallahs” – the informal money traders – have been informal sources of money transfer and savings in Afghanistan and throughout the region for centuries. Their role in the commercial and financial system cannot be under-estimated or dismissed.
- The country's legal framework – in all areas including property, leasing legislation, commercial legislation, contract law, etc. – has been under establishment for the past 5 years. It is very embryonic and enforcement will be difficult.
- The insurance sector – public and private – is practically non-existent in the country. Recently a private insurance company has entered the market, but general sentiments and comments about the service are disparaging. There are no crop insurance providers or schemes for floods, drought or other natural disasters. Afghanistan's country risk profile is generally rated as very high.
- The land title deed registry is beginning to undergo necessary reform after years of war (EMG is conducting a project on land titles)<sup>6</sup>. Many title deeds were destroyed in the war. Others are available, but may still be held in the extended family names, and not the farmer himself. The challenge lies in changing ownership from family members who have emigrated or disappeared throughout the years of conflict – and are not able to return to the country in person to process necessary changes. Many other farmers simply do not have their land title deeds.
- Human capacity at all levels of government and legal administration in the country is relatively weak, but is improving. Many key individuals who left the country during the war received good opportunities and education, and are now returning to rebuild and re-invest in their country. However, there are many more working adults – particularly in the rural areas – who have had no access to basic literacy, education or adequate nutrition throughout their lives.

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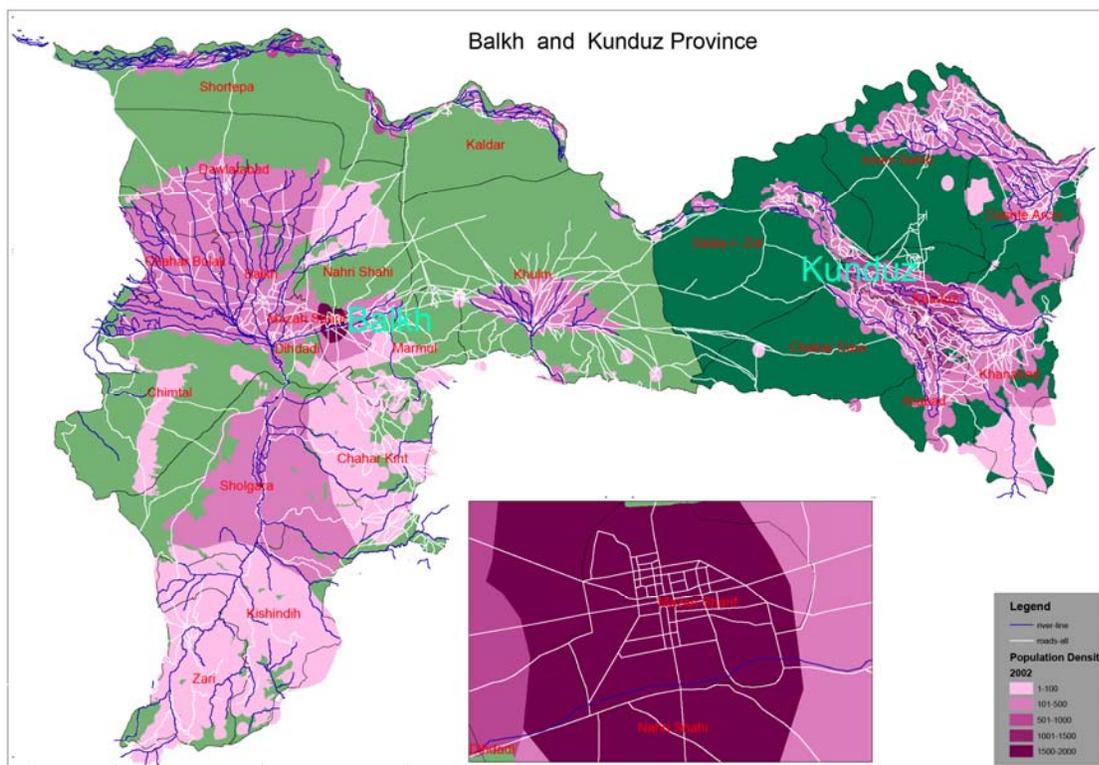
<sup>5</sup> [www.imf.org](http://www.imf.org) and [www.indexmundi.com/afghanistan](http://www.indexmundi.com/afghanistan) last accessed July 10, 2009

<sup>6</sup> Interview with Allan Kelly, Asia Development Bank, May 24, 2009

## 5.4 Balkh and Kunduz: Provincial Profiles

- Balkh and Kunduz provinces are both considered to be part of the “bread basket” of Afghanistan. Much of the country’s wheat, rice and melons come from the region. Sheep and other livestock graze regularly on the northern slopes and plains in the region.
- Balkh and Kunduz are accessible by good road to one another and to Kabul for national trade and commerce. The provinces also have the highest density of roads to population in the country.<sup>7</sup>
- Proximity of the two provinces to Tajikistan and Uzbekistan gives access to markets, inputs, and electricity power. The bridge recently constructed to Tajikistan has opened up new opportunities complementing the road and rail bridge to Uzbekistan. The road systems to Kabul are also recently re-constructed and provide good access to the national trade hub, but in the winter months, the sole feasible link between north and centre, the Salang Pass over the Hindu Kush, is often blocked.
- Balkh and Kunduz provinces are also part of the Amu Darya River Basin and its irrigation systems. This is perhaps one of the richest gifts awarded the provinces, as both irrigated and rain-fed (northern slopes of the Hindu Kush) ranges provide a good opportunity for agriculture.

**Figure 3: Map of Balkh and Kunduz Provinces**



<sup>7</sup> Interview with ARIES staff Stephanie Charitonenko and Don Henry, May 25, 2009

## 5.5 Land Use, Water Access, and Irrigation

- Afghanistan is estimated to have 12% of its land mass arable – 4% of this is irrigated and the remaining 8% of arable land is rain-fed. There are also large areas of waste or barren land that are often used for grazing (70 – 85%). Rangeland is informal grazing land – used primarily by the Kuchis – covering about 45% of Afghanistan. Rain-fed land mass is generally in upper mountainous areas and watered by snow melt and by precipitation during the spring and summer seasons.
- Rain-fed lands are important for both cereal crop production and for herd grazing, and at times compete for land use, creating a lot of social and community conflicts. The introduction of drought-resistant wheat seeds has increased production because grasslands have been broken for cultivation. But as a result, there is less grazing land for herders and pastoralists, which stresses the livestock sector.
- Land use is generally very efficient with the majority of irrigated land under cultivation. A study conducted by World Bank in 2004 gave the following assessment for Kunduz region.<sup>8</sup> This may have changed since the study was conducted as there has been major effort in the region to improve irrigation systems and use.

**Table 2: Land Use in Kunduz Region**

Land use	'000 hectares
Actively irrigated land	1,155
Inactive irrigated land	211
Rain-fed agriculture	2,428

- Farmers have landholdings on small, medium, and large farms (usually crop-shared). The unit of measure: 5 jeribs = 1 hectare; 1 jerib = 2,000 square meters. In some areas visited, only 10% of farmers owned land. The remainder rented from large landowners through crop-sharing arrangements. In one village, there were as many as 32 very large landlords, most who were professionals, large business owners, or wealthy individuals living in cities.
- As families continue to grow, there is less land available to subdivide and pass down to the next generation as an inheritance. This will result in economic and social challenges in the coming years – and creates extra pressure on land and land use.
- All agricultural activity in the country is inextricably linked to water access and water management. Rivers are demarcated by the direction of their flow from the peak of the mountain ranges. Irrigation systems – many under re-construction – follow the river patterns. The Amu Darya (Daryayi Amu or Oxus) River Basin is the primary water source for agriculture in northern Afghanistan, affecting all farming development and activities in Balkh and Kunduz provinces.

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<sup>8</sup> Water Resource Development in Northern Afghanistan. Masood Ahmad and Mahwash Wasiq, World Bank. 2004

- Irrigation systems – utilizing mountain streams, run-off and snow melt – were built and developed by various governments of the past (e.g. the Soviets, the Mohammad Daud Khan administration). Most were severely destroyed throughout the past three decades of war, but are currently undergoing major re-construction.
- Water use and management is generally poor and not valued – largely because it is subsidized and water use is not linked to any type of payment, maintenance, or responsibility. Water access to irrigation channels and canals has traditionally been completely free; maintenance has been a government activity. Recent projects and the introduction of Water Users Associations are working to change the thinking, attitudes and practice toward water use.<sup>9</sup>

## 5.6 Profile of Typical Afghan Farmer

Conversations and meetings with farmers painted a poignant picture of the typical Afghan farmer and his and her everyday life.

- The vast majority of farmers are subsistence farmers, and do not think of their farms as commercial enterprises. They farm for food security for their families first, and then for cash sales of surplus crops. Cash crop sales are usually garden vegetables, fruits, and nuts (almonds or walnuts).
- The farmers we interviewed came from families of 6-40 individuals, with an average of 15 per household. In some cases, grown children lived with their own families on the compound and worked in businesses or as taxi drivers. Women generally conduct work inside the family compound, though some do work in the gardens or fields with children. Women often care for livestock in the family compound, feeding and caring for sheep, goats and cows, especially if the family only has a few animals. Milking is usually a woman's work. Other women are involved in handwork (e.g. embroidery and carpet weaving). One of the farmers in Balkh district employed women as daily laborers during the harvest.
- Most farmers would be described as cultural “traditionalists.” They are reluctant to try new ideas, are often suspicious of outsiders and have a strong loyalty to family heritage and history. Men have had limited education, and most women we met were illiterate and unable to use their husband's cell phones.
- Farmers in northern Afghanistan are de-capitalized from war, drought and general political insecurity. The consultants were unable to visit many of the villages in both provinces because of security issues.
- The vast majority of rural households will save and invest through traditional means – the herd, particularly sheep and goats, and if the opportunity presents itself, through purchase of additional land. The herd is there for food security, and if need be, can be liquidated one animal at a time for emergencies, input supplies, family festivities or working capital.

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<sup>9</sup> Interview with Kunduz River Water Basin Project staff, Kunduz, a project through the Ministry of Water and Power and Mercy Corps

- Most farmers are very averse to borrowing. They will only borrow if needed, and the past few years of drought in the north, have been forced to do so. However, there are the outliers, and a few of their stories are included in this report.
- Most farmers are also very risk averse. To manage risks, the smallholder farmer runs a diversified farming activity – planting 2 and sometimes 3 crops a year (wheat, rice, sesame, chickpeas, cotton), some small scale horticulture for vegetables, a few livestock, and perhaps some small scale horticulture for fruit or nuts.
- All farmers we met and spoke with have dreams for their future, and that of their families. Farmers planned of purchasing additional land, additional houses (for their sons), tractors, trucks, machinery, or opening a shop if they had access to the capital.
- Most Afghan farmers are also accustomed to free or subsidized support. During the Soviet years, the government was very active in providing high levels of agricultural support and services without charge. Currently, farmers are enjoying significant free support through donor funded projects.
- The typical Afghan farmer also owns a cell phone, with one or more “sim” cards!

## 5.7 Profile of the Afghan Farm

- The Afghan farming season is from mid- to late- February or March through to November. December, January and February are typically winter season where there is little farm activity, except for soil and orchard preparation in some areas. Wheat is harvested in May or June, and is followed by rice, chickpeas, sesame, cotton or maize. Vegetables are grown anywhere from March through October, depending on the conditions, they type of vegetable and whether basic greenhouses are used.
- Land rights and availability are an issue for many Afghan farms. Access to land – whether irrigated or rain-fed – will determine the ability of the farm to plan and develop for future years.
- Mixed farming diversification is characteristic of the Afghan farm. Usually one cash crop is favored, but the concept of specialization is uncommon:
  - Arable land for cereal crops (2 sometimes 3 crops a year)
  - Horticulture (short term e.g. vegetables and melons and long term e.g. orchards)
  - Livestock (dairy and herds)
- Roughly 84% of farmers have access to fertilizers – 67% have irrigated land.<sup>10</sup>
- Farmers have landholdings on small, medium, and large farms (usually crop-shared). The farmers we interviewed cultivated an average of 21 jeribs of irrigated land, though they ranged from zero irrigated land to 120 jeribs of irrigated land. Many holdings were from 5 – 20 jeribs. Rain-fed lands under cultivation by farmers interviewed ranged from 35 – 300, with many having no access to rain-fed land. On average, the rain-fed

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<sup>10</sup> Interview with Stephanie Charitonenko and Don Henry, ARIES, May 25, 2009

cultivated land for farmers interviewed was 68 jeribs. The unit of measure: 5 jeribs = 1 hectare; 1 jerib = 2,000 square meters

- Few farms are mechanized with most labour done manually; this is changing – in Kunduz city they said that five years ago there were some 5 tractors in the area, today there are a 100; equipment is rented out to other farmers wherever possible, enabling some farmers to get ahead by buying more land with their profits.
- Manual labour is usually done by landless farmers. The going daily wage for manual labour is 200 AFN per day; however, with the good rains and extra large crop in 2009, the daily wage for manual labour is now 400 AFN per day
- The typical Afghan farm lacks storage facilities for holding large quantities of post-harvest crops. There are some exceptions, though very, very few. Farmers with post-harvest storage have a much better opportunity to improve profits as the selling price usually increases some time after the harvest.
- Some farmers use basic greenhouses or plastic tunnels to prolong the growing season for vegetables. This enables them to increase sales (increased harvests) and also take advantage of selling prices before or after peak harvest prices.

## **5.8 Markets, Market Linkages and Market Information**

- The merchant or trader is “king” in the Afghan economy – the country has been known as a land of traders for centuries.
- A “price discovery” system is operative for most farmers who trade in agriculture. Generally, traders and buyers set the market prices, based on their best knowledge of regional and international prices and demand. Farmers have little if no negotiating influence in setting prices. Many farmers we spoke to take time to telephone traders and auctioneers to learn about current prices; based on the information, they may wait or simply take the crop directly from the field to market.
- Mercy Corps is exploring adaptation of its market price server used in Mongolia and East Africa for Afghanistan. Inserting a chip into a cell phone would give the farmer access to current produce prices. Other projects have also tested SMS messaging through cell phones for market information.
- Farmers will sell crops through: auction in wholesale and primary markets, consignment, or through advance sale from the field. However, when the trader purchases crops in advance from the field, the farmer is often only paid a partial installment. Many times the trader will take a year to pay the farmer, but because the farmer is desperate for cash, he must often sell under duress and at a financial loss.

## **5.9 Agricultural Risks – the Farmer**

- External risks are part of the farming landscape – drought, frosts and floods; too little or too much water will affect cattle, sheep, and all crops – cereal and garden crops. There are no crop insurance services or schemes operating in the country.

- Pests and diseases are a part of farming life as well; aphids and other insects, fungal diseases, rust and other diseases may affect both horticultural and cereal crops.
- Soil quality, location and access to water will also affect the risks and profitability of the Afghan farm; the soil is generally silty (alluvial or loess (wind blown) silt) and semi-arid. In some locations, underground water may be too salty for good agricultural production. Access to irrigation is critical for most well-diversified farms
- Sales price fluctuation in farming is also a common problem in Afghanistan, as it is for farmers around the world. Prices are the lowest during the post-harvest period when supply is the highest. The lack of storage facilities and market information and influence forces farmers to sell at the bottom of the market when prices are very low. Commodity goods such as basic resources, minerals and agricultural products are also vulnerable to price fluctuations based on world markets as a whole.
- Most farmers are subject to very uneven cash flow during the course of a year; liquidity is rarely available when it is most needed – at soil preparation and planting time, or at harvest time, just before the crop is sold. Harvest costs include equipment rental and manual labour.

### **5.10 Farm Risk Management Strategies**

Most of the risk management strategies taken by the farmer are traditional in nature:

- The Afghan farm is diversified with several crops and some livestock. Diversification, multi-cropping and inter-cropping is the farmer's way of ensuring that if one crop fails, there may be another one that succeeds, acting as a safety net in the overall farm activity.
- The Afghan farmer farms for food security first, and then high value crops for cash generation. Overall, these first two approaches have been used for decades in rural Afghan communities. However, in an age when globalized agriculture is mechanized and specialized, these approaches may no longer serve the Afghan farmer. Thus, the transition to a new agricultural economy in the country is inevitable, but may take time.
- Another risk management approach is for the farmer to save through investing in the herd or through the purchase of more land. By saving through the herd, the farmer is able to liquidate when needed; the herd meets multiple uses for the farmer, such as cash, meat, skins, wool for kilims, etc.
- Afghan farming communities are typically highly independent and individualistic in nature. There is no evidence of group bulk buying or selling occurring naturally. The cooperative history is generally very weak. However, there is some communal and family activity coming together around harvest time. There is a current movement to form farmer groups – whether producer associations or common interest groups. Their effectiveness as a collective bargaining voice remains to be seen.

Finally, farmers are also increasingly managing their farm risks by:

- Recognizing the importance of good extension services, pesticides, and fertilizer use – through demonstration plots and other live illustrations, and

- Using good inter-cropping techniques in orchards, such as alfalfa

### 5.11 Agribusiness and Processing Sector

- The agri-processing sector has been decimated by years of war and conflict. Private business people fled the country during the 1970s through the late 1990's closing factories, businesses, and daily operations. Large factories that the Soviets established in the 1970's and 1980's are generally defunct. Investors and business people are just beginning to return to re-open, to reinvest and to re-build the country's capacity for processing.
- Export markets that Afghanistan held in the 1960's and 1970's (for raisins, grapes, almonds, and apricots) have been lost but are beginning to re-emerge; product quality is still a challenge, but significant effort is underway to re-establish some strong export sectors (almonds, apricots, raisins, pomegranates)
- In general, banks and donors are not focused on long term investment in agribusiness and agri-processing as a priority. It is perceived as being too risky with payback much delayed (perhaps the political climate reinforces short-term thinking). As a result, the short term investments, like trading, buying and selling become the investment of choice. Only in the past few years is there an increased interest in investing for the long term. Refer to **Appendix 5** for a list of SME processing and agribusinesses in Balkh and Kunduz provinces.
- The formal banking sector provides little SME or bank credit to agri-sector, manufacturers or processors; it is dominated by lending to traders and the construction sector.<sup>11</sup>
- As described in a later section, there has been significant donor and project support to the agricultural sector in the development and support of commercial service providers such as farm stores, AgDepots, veterinarian services and shops, seed companies, and horticultural support. These are important input-level goods and services that farmers and producers rely on. Sizes and scale vary from one service provider to another.
- Financial constraints are a barrier to growth in both agriculture and agribusiness and processing. Companies have survived for years by continued and gradual re-investment, causing lost opportunities and sluggish growth.

A sesame seed oil press in Kunduz city is operated by two friends who have worked together for the past 20 years. Fifteen years ago, the engineer of the pair saw an expensive German oil press. They did not have money to buy the machine, but he had the ingenuity to replicate the design of the machine and make his own.

The business has never borrowed money. It now operates 2 presses, but they do not nearly work to full capacity. The business has very little working capital needed to purchase bulk sesame seed that the market demands. As a result, farmers take seed to the trader or oil press with the greatest potential to pay immediate cash for purchase of stock.

<sup>11</sup> Interviews with FMFB and BRAC

- The lack of post-harvest storage, and in some cases refrigerated storage and transport, is also a barrier to growth. Afghanistan's horticultural advantages are then lost because most products and crops are highly perishable with a very low shelf life
- Informal credit is not maximized in most value chains and microfinance service providers have very limited reach into the processing sector. There are also exceptions to this generality, as is described in section 8 in the wheat value chain with the new flour mill in Mazar beginning to look at financing farmers with good quality seed and fertilizer in order to increase the production and input of Afghan wheat.

## 5.12 Attitudes to Credit

Attitudes to credit vary throughout the country. Most farmers are very averse to credit – a loan is a debt, a burden. Many small business owners – the micro-, SME-sized, and those from larger farms are also credit averse.

In discussing credit and cash flow problems with farmers, it became clear that there were a variety of attitudes to borrowing.

- Avoid borrowing if at all possible
- Borrow locally wherever possible
- Borrow at your own risk!

The additional resistance to credit by both farmers and many business people is the issue of “riba”<sup>12</sup> – or usurious interest. Islamic teaching on interest is based on the concept of both the lender and the debtor sharing the risks and the profits of the investment. However, it is not based on the concept of “time value of money” nor does it take into account the hidden cost of inflation (estimated to be 13% in Afghanistan in 2008). Therefore, modern commercial banking and MFI practice are frequently misinterpreted and misunderstood with respect to how they charge fees for borrowing.

Another interviewee's opinion was that the interest rate issue – the Islamic vs. non-Islamic concepts – was over-rated. He believed it only became an issue if rates charged were exorbitant.<sup>13</sup>

### **Informal borrowing:**

Afghans – and Afghan farmers – will borrow from local sources first – family or friends. However, the recent droughts in the north put everyone in the same position. No one had cash and everyone was cash poor. Shopkeepers and traders have been the traditional sources of informal financing. Levels of borrowing are very small and only well-known and trusted individuals (usually with assets) are lent to. Many shopkeepers accept in-kind payment for the loan; others increase the bag of fertilizer by 10 AFN. However, informal loans are rarely repaid at harvest time; most often the term is a week, two to three weeks or a month. Regardless of the terms of repayment, it was very clear that neither the lender nor the borrower calculates the “cost of the borrowing.” It is viewed as a social obligation common in a culture that values

12 “Riba” means “usury” in Arabic and is generally forbidden by observant Muslims. There are two types of riba discussed by Islamic jurists that are prohibited a) an increase in capital without any services provided and b) commodity exchanges in unequal quantities.

13 Interview with Ahmad Javaid Zeerak, AREDP, May 25, 2009

relationships and networks, and where “each good turn deserves another.”

**Negative experiences of microfinance borrowing:**

Two groups of farmers in Khulm district, Balkh province were adamant about the vices of credit and borrowing; they had had too many negative experiences that convinced them never to borrow again.

“These microfinance institutions – they suck the life-blood from your body – until there is nothing left!”

“They destroy the economy – they don’t build the economy!”

“We know of a farmer who had to sell his land in order to repay the loan.”

“We would rather borrow from a local trader who also pays us very little, but then we know the money is staying in the community!”

In probing the groups about their experiences, the Consultants learned that the loan repayment frequency was completely inappropriate for their farming activities – contributing to the negative perceptions voiced.

However, the Consultants also found exceptions to the commonly-held attitudes.

**CFA borrowers:**

In the CFA Branch in Kunduz, farmers were generally very happy about the agricultural loans offered to them. The fees and interest rates were comparable to other institutions, but the 1 year loan term only had two installments for a repayment – the first installment was due after a 6 month grace period, and the final installment was due at the end of 12 months.

The loan terms were completely suited to the farmers’ household and cash flow needs, and repayment was not a hardship or inconvenience.

**FMFB Farmer Client, Balkh City**

An industrious, ambitious 60 year old farmer is an FMFB client now in his 5<sup>th</sup> loan cycle. He is married with 6 children, 2 daughters and 4 sons. All of his children are studying or carrying on business activities. He owns 5 jeribs of irrigated land and rents 250 jeribs of rain-fed land on a share-cropping basis from a landowner/lecturer at Balkh University who owns more than 1,800 jeribs. He inherited his house and land from his father.

Today, this farmer also owns 2 tractors, 1 car, 1 truck and 5 mobile phones. He employs 2 drivers – since in addition to farming he runs a transport business. Although he is illiterate, he has worked hard and wisely at farming and continually reinvested his surpluses into buying houses (for his sons’ future inheritance) and in additional irrigated land.

**Loan**

This farmer has no bank account, but started borrowing from ARMP with a \$500 loan. He had never borrowed in his life before; a relative, who used to work at ARMP told him about the program. Today, he has a loan of \$5,000 and is on his 5<sup>th</sup> loan. Normally he likes to clear his loans after 6 months, since he has the available cash, and early payment helps him to reduce

the costs.

### **Crops and Sales**

This is a good harvest year and he is expecting to harvest 3.5 tons (250 Mazar Ser)<sup>14</sup> of wheat: 0.7 tons for home consumption and 2.8 tons for sale. In 2008, he sold 5.25 tons (750 Kabul Ser) of chick peas. This year he is expecting to harvest 14 tons of chick peas and 1 ton of sesame seeds. He uses his own transport to take crops to the merchants in Mazar.

### **Tractor**

He bought his first tractor by selling 2 cows and taking out the loan for \$500. Today he rents out the tractor at 700 AFN/hr. At a rate of 10 hours per day, 20 days per month for 10 months = \$2,800/year.

The most remarkable aspect of this farmer's story was the sense of pride and satisfaction in his accomplishments. He was very grateful for the support of appropriate loans from ARMP and now FMFB.

## **6.0 FINDINGS AND OBSERVATIONS FROM SECTOR STAKEHOLDERS**

Throughout the study, the team visited many projects, government ministries, and other stakeholders who are active in the agricultural sector in Afghanistan. The environmental context of the country is constantly changing – with revised developmental policies, new projects and initiatives, improved infrastructure, legal framework, and other changes. The learnings will need to be remembered and the activities coordinated in the future to ensure that this invaluable support makes a lasting contribution to a commercially viable agricultural economy in Afghanistan.

The table below highlights the salient points gathered from conversations and interviews with key stakeholders. These findings were corroborated by farmer, input supplier and producer interviews and have shaped the conclusions and recommendations of this report.

**Table 3: Observations and Learnings from Key Stakeholders**

<b>Stakeholder/Project/ Visited</b>	<b>Key Observations and Learnings</b>
<b>Asia Development Bank</b>	<ul style="list-style-type: none"><li>• The ADB is placing a strong emphasis on agricultural marketing infrastructure (North)</li><li>• They are looking to develop private - public partnerships in a plan to build 5 slaughter houses within the next 2 years</li><li>• They are keenly interested in SME business of edible oil seed production (sesame, cotton, etc.)</li><li>• They are also funding other projects with MAIL, HLP, RAMP, ARIES and ASAP. MISFA has received USD \$2.5 million for rural finance.</li><li>• Perceived value chain gap: finance! No SME commercial banking. Very little farm credit</li><li>• Dairies are struggling (e.g. the FAO dairy only at 50% capacity because it can't get enough milk - not</li></ul>

<sup>14</sup> One Mazar Ser is 14 kgs; one Kabul Ser is 7 kgs.

	<p>enough cattle or cattle feed)</p>
<p><b>ARIES</b></p>	<ul style="list-style-type: none"> <li>• ARIES addresses short, medium, long term financing needs in rural areas</li> <li>• ADP (Agricultural Development Program) areas focus of USAID – all agricultural activities are focused in those areas highly linked to the policy of poppy eradication</li> <li>• ARIES fund \$58 million USD to the SME / micro sector through FINCA, WOCCU, MISFA and other partners</li> <li>• GIS Mapping system by district (ASAP has done a lot of work on perennials, annuals, and livestock information)</li> <li>• Balkh – common crops are sesame and wheat – also onion, tomato, eggplant, okra, carrot, cotton, alfalfa (competes with poppy though not as inter-cropping in an orchard (replenishes the soil)</li> <li>• Horticulture: fruit / nuts, grapes (13%), vegetables</li> <li>• Livestock - 63% of Afghan households are rural; 89% of rural households carry out agriculture, livestock, and poultry production</li> <li>• Sector needs more coordination – a role that MISFA can play</li> </ul>
<p><b>FAO</b></p>	<p>Primary Comments from farmers about credit generally:</p> <ul style="list-style-type: none"> <li>• Interest rates are too high</li> <li>• Instalment repayment and frequency is inappropriate</li> <li>• Large farmers can adjust – and diversify</li> <li>• Demand for AVA services</li> <li>• Wheat production is common: wheat is farmed for consumption – staple – food security)</li> <li>• Traditional lending takes place (farmers / shopkeepers) – but primarily farmers with assets</li> </ul> <p>General Comments and Initiatives:</p> <ul style="list-style-type: none"> <li>• Kabul Bank is there – operating costs of agriculture credit is very high – how can lending to the agricultural sector be subsidized</li> <li>• The returns on crops are generally very low</li> <li>• Irrigation systems in 2 provinces good – Balk and Kunduz</li> <li>• Storage, price management, packaging, processing an issue for majority of crops</li> <li>• Kunduz dairy – small plan producing about 2,000 litres a day, sourced by cooperatives, use daily cash transfer; daily fresh milk collection</li> <li>• Kabul has a dairy that produces 5,000 litres per day</li> </ul>

	<ul style="list-style-type: none"> <li>• Mazar capacity 5,000 litres per dairy – but currently producing about 3,000 litres a day</li> <li>• Poultry keepers need microfinance – a financing gap</li> </ul>
<p><b>MRRD – AREDP Project</b></p>	<ul style="list-style-type: none"> <li>• They are running a matching grant intervention project in 7 provinces for SME size businesses</li> <li>• The project provides technical assistance: business plan development, link to markets, identify business investment needs</li> <li>• Just approved \$1 million – (model based on the Tajikistan model seen in a study tour there) SME grant equity fund</li> <li>• AREDP (MRRD) is completing a Study / Survey of all SME agribusinesses and processors in all 34 provinces of the country. <b>Appendix 5</b> includes highlights from the survey conducted for Balkh and Kunduz provinces</li> <li>• They have also just completed a 3 province survey in certain sectors (Herat: saffron, cashmere, silk; Balkh: almonds, carpets, melons; Bamyan: potato, carpets, tourism)</li> <li>• Banks have a number of issues: confluence, capacity, capitalization and demand side issues; also issues of collateral, absence of title deed, etc. These are all barriers to lending to the sector</li> <li>• Cost controls are very important in microfinance</li> <li>• The AREDP has set up a Guarantee Facility for SME businesses – 50% of the equity is put in as a grant – funded by 5 donors (CIDA – Kandahar; DFID, WB – Mazar, Parwan;) for appropriate lending products to SME's</li> </ul>
<p><b>Horticulture and Livestock Project, MAIL</b></p>	<ul style="list-style-type: none"> <li>• Specific districts in Balkh and Kunduz have a lot of livestock; small scale farmers (supported through FAO) – there is a need to build up the herds again</li> <li>• Balkh – last year had a large drought, high death rate of livestock – up to 50% of the herd – currently low capacity -- need to build up the herd and need credit to do so – MAIL also supports veterinarian services through vaccinations, nutrition advice, etc. It is difficult to know exactly how much support is provided and whether fees are affordable.</li> <li>• Dairy, poultry are common, but there is a need to increase the poultry production. Currently poultry is a subsistence activity – farmers think first of the household first – food security.</li> <li>• Microfinance and financing terms – MFIs and banks need to think about longer term agricultural and farm needs, e.g. irrigation, investment in orchards, investment in machinery</li> </ul>

	<ul style="list-style-type: none"> <li>• ADB – interested in longer term loans, in-kind loans and payments – 3,000 – 5,000 orchards have been replanted, terms 3 – 5 years repayment</li> <li>• The horticultural expert works with helping farmers to develop farm plans – a hybrid scheme of farm redevelopment - short term inputs and long term inputs; loan repayments need to reflect the needs. Long term thinking for farmers will come slowly – have started farm planning with 250 farmers – will try to reach 30,000 farmers</li> <li>• Very little production calculation by farmers – primarily communal and family work</li> <li>• The HLP works a lot with the concept of “lead farmers” – the tradition of formal cooperatives tend to be negative; CDCs work well</li> <li>• The HLP works with Common Interest Groups of about 25 members – producers, orchards, etc. – and invest in capacity building – e.g. bookkeeping, registration, management, credit management, etc. They also invest in low end infrastructure and community strengthening; They work on a Village Savings and Loans module – with savings boxes, and internally generated loan funds</li> <li>• Repayments a challenge – still some charity mentality; farm business returns are low and therefore a challenge</li> <li>• Farmers need to value the services</li> <li>• The HLP works in the Central Region (below the Salang), Kabul, Parwan, Kapisa and Panjshir – and above the Salang – Balkh, Kunduz, Baghlan, Samangan, and Saripul, Jawzjan and Takhar</li> <li>• The irrigation network is under repair – and there is still a shortage of irrigation systems</li> <li>• Some rain harvesting but could do much more – catchments, open springs</li> <li>• Need to teach proper irrigation and water use</li> <li>• Country’s population is now growing rapidly – high birth rates, returnees, and lower child and mother mortality</li> </ul>
MAIL	<ul style="list-style-type: none"> <li>• The Ministry is developing a new strategy for future planning “The 4 Major Pillars”: <ul style="list-style-type: none"> <li>a) APP (Agriculture productivity and production)</li> <li>b) Natural Resources management</li> <li>c) Economic Re-generation (everything part and parcel of the farm) – all financial</li> <li>d) Change management – internal to the sector – the ministry</li> </ul> </li> <li>• Farmer – agricultural and SME credit is a huge need in the country</li> </ul>

	<ul style="list-style-type: none"> <li>• Strategic partnerships in Value Chain Financing needed (\$20 - \$50 thousand SME financing needs)</li> <li>• There is an interest and need to serve the Kuchis</li> <li>• Land holdings are going down because of challenge in handing down to the next generation; there is no spare land available and there is a lot of pressure on the land</li> <li>• Country has undergone a 5 year drought - 2008 was the worst year – farmers lost an estimated 50% of the national herd</li> <li>• VFU's: – user fees – negative perspectives, awareness, public reputation is low). (This comment might need to be tempered since some government ministries see the private sector as offering poor quality goods and services).</li> <li>• AREDP – want to use / promote VSL's (Village Savings and Loans Associations)</li> <li>• Financing limitations of the industry – (during the 70's and 80s the ADB was successful) USAID tried to revive the bank and issued a report to recommend such action; some discussion is underway but it is a high risk venture</li> <li>• Estimated \$95 million demand for SMEs alone – Kandahar have their own informal banks</li> <li>• Sheep wool production of kilims usually a family business – not generally a high commercial value</li> <li>• Specialty crops increasing– saffron, licorice, cumin, rose oil</li> </ul>
<p><b>ROSHAN and m-Paisa</b></p>	<ul style="list-style-type: none"> <li>• M-Paisa is a separate wholly owned company of ROSHAN (he is president) – expanding access to rural communities</li> <li>• M-Paisa was set up for the CSR component of ROSHAN</li> <li>• Purpose of M-Paisa is rural finance access</li> <li>• Handles peer to peer money transfer – 1.2 million P2P transactions daily -- and in the future as a conduit of money transfer from customer to bank account – the mobile phone is, in essence, the ATM</li> <li>• 60,000 customers registered with m-Paisa; P2P – mass market product – Scale will mean \$\$ -- for the national market</li> <li>• Want to work with MFIs – need agents, need to get cell phones (\$17 USD per handset) to MFI clients bundled with a loan</li> <li>• Strategic partner is Vodafone (UK) – 6.7 million users of ROSHAN and 54% of country coverage (largest provider in the country – 3.3 million subscribers and 42% of the market share</li> <li>• Expansion to rural areas remains a challenge –</li> </ul>

	<p>constructing network towers in remote rural areas, setting up m-Paisa agents and ROSHAN dealers in those areas, and increasing the market uptake of mobile phones.</p> <ul style="list-style-type: none"> <li>• M-Paisa has already developed a relationship with MISFA and held a workshop for MISFA partners outlining opportunities for the expansion of rural m-Paisa agents, distribution of handsets in rural areas, and the opportunity to test m-Paisa services</li> <li>• Their current biggest challenge is funding</li> <li>• Another challenge is to work with the banks in becoming “bank to client” conduits/channels for bank/customer transactions – specifically for savings, bank transfers, payments and other transactions.</li> </ul>
<b>ACDI/VOCA and ARFC</b>	<ul style="list-style-type: none"> <li>• USAID 3 year project through ARIES ending September 2009; ARFC – Afghan company to handle SME loan funding</li> <li>• Now have clarity on their loan fund disposition – (done on case by case basis by USAID) and ARFC can now access additional equity and loan funding for expansion</li> <li>• They have \$17.5 million in capital – \$13 million in loans</li> <li>• Loans range from \$20,000 to \$2,000,000 – average loan size is \$250,000</li> <li>• 10 – 15% interest – daily overdraft to 5 years; 3 loan write-offs – character loans – due diligence, character based – strong performance</li> <li>• 70% agricultural sector portfolio – marble, carpets, poultry association, cut and wash, and others</li> <li>• Have had to monitor their sustainability / development balance – and are now heading to a much more commercial orientation</li> <li>• They value high collaboration with other partners!</li> <li>• Also involved in the P2K project – 19 farm stores – provided capital to the farm stores for on-lending down to farmers; None in Balkh or Kunduz; the pomegranate extraction plant plans to do some contract farming with the P2K farm stores</li> <li>• Mazar clients: flour mill processor, farm equipments, inputs</li> <li>• Suggest MISFA to drive the collaboration process – drive the facilitation process at the low – medium end of the scale</li> </ul>
<b>PEACE (Promoting Engagement and Capacity Enhancement Project)</b>	<ul style="list-style-type: none"> <li>• A Kuchi livestock project; providing range land management tools – and how to reach the Kuchis and their role in Nomadic livestock production</li> </ul>

	<ul style="list-style-type: none"> <li>• Lots of conflict resolution – therefore their objective is to build Kuchi stability</li> <li>• Piloting Risk Management for Kuchis – development collective action groups – savings led, connectivity to communities</li> <li>• Fourth project year of Phase I finishes June 2010 – Phase II will be larger include fattening, better value-added activities, better forage for animal fattening,</li> <li>• Livestock is very important to the national economy, but livestock has never been on the radar</li> <li>• Lots of veterinarian medicine, but a lot of gaps and lack of coordination</li> <li>• Is microfinance to pastoral Kuchis possible? Colleague with years of microfinance experience for pastoralists in Ethiopia and northern Kenya is coming to visit Afghanistan in early July</li> <li>• Seasonal use (harsh winters, snow); Issues of water supply; Water tables are very, very low or non-existent – depend on the spring rain and the snow melt</li> <li>• Two reasons why Kuchis are rarely addressed in programs a) perceived Pashto link and the Taliban b) nomadic</li> <li>• Phase I of the project is now nearing completion. Phase II – use the lessons learned from Ethiopia, Kenya in developing savings led groups and pastoral risk management programs for nomadic herders</li> <li>• Rural MF and Livestock (IFAD) program of MISFA – hope to establish a linkage</li> <li>• Two types of livestock: Intensive livestock - in the village and Extensive livestock – public range lands – Kuchis supply the villages the animals, Kuchis are the traditional animal breeders; on average have 60 animals in a herd</li> <li>• Kuchis will purchase forage from villagers to fatten animals for export or for market; the project attempts to force business relationships – get governance issues addressed through business relationships</li> <li>• Project works in 13 provinces – in the north – the Kuchis have a permanent home a “tent base”; the project establishes pilot activities in the north and then cross-fertilizes / demonstrations between different areas</li> <li>• Project has taken 6 surveys to see what Kuchis’ contribute to the livestock – Kuchis represent 8% of the Afghan population but contribute up to 70% of the meat and leather in the national economy; 1 million animals a year is the contribution</li> <li>• Last year’s drought had a major impact on herd – many of the lambs got dumped before the Kuchis</li> </ul>
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	<p>moved</p> <ul style="list-style-type: none"> <li>• Others sold lambs for \$6 piece – when they usually sold between \$30 - \$45 a lamb</li> <li>• Drought tolerant wheat has become a problem because villages have expanded and the range land was destroyed – has become a very difficult ecological situation</li> <li>• Winter range land has been converted to wheat – so there are small winter range lands remaining – this will affect the livestock industry and indirectly the carpet and leather sector</li> <li>• Commanders and the communities also tax the Kuchis to graze – so they are only moving if they have to – adding additional stress on the range lands</li> <li>• Lots of cell phone use among the Kuchis – because the move in the high altitudes, they get coverage from many and all cell phone networks</li> </ul>
<b>Mercy Corps</b>	<ul style="list-style-type: none"> <li>• Mercy Corp has a price market server – SMS based – and is currently working at its application for Afghanistan</li> <li>• It has been previously used very successfully in Mongolia and in East Africa</li> <li>• This service is not through ROSHAN but through Mercy Corps' own server. You simply need to put a chip into a cell phone and can connect to get information</li> <li>• This has significant market potential in the country</li> </ul>
<b>CNFA</b>	<p>CNFA started in Afghanistan in 2004. The main project currently is the Afghanistan Farm Service Alliance (AFSA).</p> <ul style="list-style-type: none"> <li>• \$3.5m project for 2years</li> <li>• CNFA has experience in setting up farm stores in other countries</li> <li>• Has formed 7 Farm Stores in Nangarhar, Kunar, Laghman, Kandahar, Helmand, Ghazni and Zabul with local fairly well-established business people</li> <li>• An eighth store owned and managed by and for women has opened in Kabul</li> <li>• Because store owners are local, they have to deal fairly with local community – contrast with AgDepots and Noor Bros. FSC owners are carefully selected and motivated to help the community. They bring in most of their own capital to the venture</li> <li>• CNFA oversee in the first year of operation and then carry on training in year 2.</li> <li>• AFSA has created 115 full time jobs through its stores.</li> <li>• Association set up for Farm Service Centres AFSA - FSCs.</li> </ul>

	<p><b>FSC Store Profile</b></p> <ul style="list-style-type: none"> <li>• Stores aim to be one-stop shop for inputs: seeds, fertilizer, machinery etc.</li> <li>• Offer extension services <ul style="list-style-type: none"> <li>1.1 Safe use of pesticides training</li> <li>1.2 Veterinary training</li> <li>1.3 Business training</li> </ul> </li> <li>• Rent out machinery with driver</li> <li>• Emphasis on quality inputs and standards for stores</li> <li>• Much larger than AgDepots.</li> <li>• Target 20,000 farmers</li> <li>• Able to give 10% discount through efficient bulk input supply chain management</li> </ul> <p><b>Output Marketing</b></p> <ul style="list-style-type: none"> <li>• FSCs may purchase produce from farmers or accept produce as payment in kind for inputs.</li> <li>• Maize and Wheat – have mills installed in villages in Helmand owned by the farm store and rented out.</li> <li>• DAI have set up TAMAS – price info system using mobile phones.</li> </ul> <p><b>Credit</b></p> <ul style="list-style-type: none"> <li>• AFSA can go for big deals in the market through combined buying power.</li> <li>• Mostly from own resources, but might need large scale credit</li> <li>• Difficult to charge loan interest in the Pashtun belt in south and east – much stricter than the north.</li> </ul>
<p><b>Roots of Peace</b></p>	<p>USDA Perennial Horticulture Program</p> <ul style="list-style-type: none"> <li>• Wheat flour commoditization project (12,000 t) <ul style="list-style-type: none"> <li>○ Started with oil but changed to wheat flour. Negotiations on supply started in Oct 2008, but first delivery of flour only arriving now.</li> <li>○ Difficult to implement with long supply chain</li> <li>○ Wheat price has dropped dramatically and delays in project implementation have meant that this \$8m project is now only \$4m.</li> </ul> </li> <li>• Operating in Wardak, Logar, Ghazni – all areas where security is a big issue</li> <li>• Crops include grapes and apples</li> <li>• Trying to implement grape trellising, but AOGs are burning anything supplied by US</li> <li>• Credit component <ul style="list-style-type: none"> <li>○ Working with IRD (the NGO contractor responsible</li> </ul> </li> </ul>

	<p>for inspection of USAID projects)</p> <p><b>Credit</b></p> <ul style="list-style-type: none"> <li>• Traders commit farmers by paying some cash up front but do not always complete payment at harvest. So farmers are subsidizing traders with credit.</li> <li>• Discussed warehouse receipts. Difficult to implement without good storage. Merchants could operate this tied to a bank loan.</li> <li>• Afghanistan carries a 10% risk premium. Surrounding countries have subsidized agriculture and the Afghanistan currency is over-valued. This puts farmers at a great disadvantage in export markets</li> </ul>
<p><b>IDEA – New</b></p>	<p>This is the new USAID ALP poppy eradication project. The notes below describe some of the activities of the project that preceded IDEA.</p> <p><b>AgDepots</b></p> <ul style="list-style-type: none"> <li>• Supplying 2 wheel Chinese tractors to AgDepots. <ul style="list-style-type: none"> <li>○ \$3,800 each for unit plus <ul style="list-style-type: none"> <li>▪ Trailer</li> <li>▪ Seeder</li> <li>▪ Rototiller</li> <li>▪ Reaper</li> <li>▪ +service</li> </ul> </li> <li>○ Procured locally by tender from JDA</li> <li>○ AgDepots free to decide price and sell them – capitalisation</li> </ul> </li> <li>• Demonstrations and promotion to farmers: <ul style="list-style-type: none"> <li>○ Replaces a team of oxen</li> <li>○ Only eats when in use!</li> <li>○ Depots to offer one week operation and maintenance training package plus 3 visits per year.</li> <li>○ May sell tractors to farmers at subsidized rate</li> </ul> </li> <li>• Training by and through AgDepots. Plastic harvest crates used as training reward.</li> <li>• Trellises for grapes through AgDepots</li> <li>• Could offer contract pruning and spraying service</li> <li>• IDEA Partnership with ASAP to use up ASAP budget</li> <li>• 70 shops in 5 provinces</li> <li>• 4 -5 non-profit Provincial Associations of Agricultural Retailers established</li> <li>• Tractors (above) could go through Associations –</li> </ul>

	<p>retailers sell them and plough the profit into the association – retailers think this is a good idea</p> <ul style="list-style-type: none"> <li>• Balkh Association has accumulated a large fund (\$300k) through the animal feed program but is not sure how to use it.</li> <li>• AgDepots also stocking Pakistani high pressure sprayers</li> <li>• Reaper demo planned now when there is a harvest labor crisis</li> </ul> <p><b>Farmer Extension</b></p> <ul style="list-style-type: none"> <li>• NGOs operating in agriculture in Afghanistan since 1988 but still no one knows how to prune a tree</li> <li>• Dormant oil demos held in late May to show effect on aphids</li> </ul> <p><b>IDEA</b></p> <ul style="list-style-type: none"> <li>• A 5 year project</li> <li>• After 2 years will look at credit</li> <li>• Production oriented in contrast to ASAP which was market driven</li> <li>• Bottom up approach to associations appreciated by traders – talking to ASMED to explore collaboration and synergies</li> </ul>
<p><b>ASAP</b></p>	<ul style="list-style-type: none"> <li>• 300 AgDepots in 19 provinces</li> <li>• 400 Veterinary Field Units (VFUs)</li> <li>• Quality link to market</li> <li>• Link to AgDepots and VFUs</li> <li>• Link to exporters</li> <li>• Grape trellising through AgDepots but needs credit</li> <li>• Huge improvement from dormant spraying</li> <li>• Business training needed to larger farmers to manage their money</li> <li>• Huge push on producer associations and loans to them (sounds like a bit of a top-down approach)</li> <li>• ARIES workshop on SMEs planned: <ul style="list-style-type: none"> <li>○ workshop prep Jun21</li> <li>○ workshop Jul 20-21</li> </ul> </li> </ul>

## 7.0 FINDINGS AND OBSERVATIONS OF FINANCIAL SERVICES SECTOR

### 7.1 Current Afghanistan Microfinance Context

“The Microfinance Investment Support Facility for Afghanistan (MISFA) was set up in 2003 at the invitation of the Afghan government — to get donor coordination right from the start and avoid the counter-productive efforts that have emerged from conflicting donor objectives in other post-conflict situations. It was established as a vehicle through which the Afghan Government and international donors could channel technical assistance and funding to build Afghanistan’s microfinance sector, though more recently this mandate was expanded to include the lower ranges of small and medium enterprises (SME) lending.”<sup>15</sup> The microfinance sector in Afghanistan is still in a rather nascent stage, with most institutions launched in 2004 or 2005. MISFA currently works with 16 partner MFIs, who represent outreach of over 440,000 clients and a total portfolio of over USD 100 million, about 30% of which is classified as rural<sup>16</sup>. Building capacity in all areas of MFI management, including credit management and developing market-led services, continues to be a challenge.

- MISFA currently collaborates with and supports 16 microfinance service delivery partners in Afghanistan. Many were launched in 2003 and 2004 with international NGO support and technical assistance.
- The first 4-5 years of operations were characterized by high growth expectations from donors in particular without the necessary foundation of strong systems, market-informed and -driven loan products, internal controls or management. As a result, the sector has been affected by significant fraud and delinquency.
- A new management team was installed in MISFA in early 2008 and has led the sector in a period of consolidation, recovery, institutional capacity-building and strengthening while at the same time encouraging solid growth and expansion.
- While there is high need and demand for micro- and SME- finance in Afghanistan, products and service delivery must be characterized by market-led approaches and not simply “adaptation of models” used elsewhere. There is also a strong need for credit staff to understand loan analysis, credit management, and client assessment, over and above understanding credit methodologies and procedures.
- Human resource and management capacity, particularly in MIS, mid-management and financial management remains a challenge for most partner institutions.
- MISFA is encouraging its partners to expand to rural and agricultural markets, with the hope that up to 40% of the portfolio will eventually be dedicated to rural Afghans engaged in agriculture and livestock production.
- The issue of Sharia-compliant lending cannot be ignored and will not go away. The vast majority of Afghans are very sensitive to the issue, particularly in southern regions of the country. MISFA plans to address the topic with its partners in 2009. The biggest barrier

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<sup>15</sup> [www.misfa.org.af](http://www.misfa.org.af) last accessed July 10, 2009

<sup>16</sup> MISFA. “MF Sector Update January 2009.” January 2009.

seems to be the perception that most loans are indeed speculative and usurious transactions and fees are indeed “riba.” However, loans with appropriate grace periods and appropriate repayment frequency usually meet the concept of “shared risk” and “shared profits” between the lender and the borrower that is characteristic of Sharia-compliant lending. There are outliers in the discussion of these issues as well; Afghans who have had more exposure and education generally understand that the “cost of doing business” for a bank will result in a fee for service charge (i.e. interest) and are much more comfortable with the concept.

## 7.2 Current Afghanistan Small and Micro Enterprise (SME) Financing Context

The SME financing sector in Afghanistan is very recent. Both ShoreBank (through MISFA) and KfW are involved in supporting the development of SME lending in the banking sector of Afghanistan, although most pilots and developments are not fully-tested.

Given the focus on the smallholder farmer clients of the TOR, and the limited time to complete the research activities, during this study the Consultants only spoke with FMFB and their SME department and the ACDI/VOCA fund ARFC; no other banks or SME lenders were consulted. The study did not incorporate discussions with MISFA’s own SME department, launched in 2006 with the support of ARIES. MISFA currently profiles two of its SME partners on its website, the AIB and FMFB – A.

“MISFA’s Small and Medium Enterprise (SME) Wholesale Lending Department was created under the aegis of the USAID-funded ARIES project and has been operating since late 2006. This SME Department is dedicated to developing SME lending (loans with a range of \$3,000 to \$300,000) by local financial institutions. Participants can include either banks, MFIs, or other types of financial institutions. Through the ARIES program, MISFA’s SME Department has been initially managing a fund of \$15 Million for this purpose.

As part of the ARIES project, the United States consulting firm ShoreBank International has been responsible for building the capacity of the MISFA SME Department in appropriate lending methodologies. At least one staff member of ShoreBank has been working as resident advisor to MISFA since the beginning of ARIES, drawing up policies and procedures, providing technical guidance and mentoring the staff of the SME Department as they handle the practicalities of their mission. Specific support includes:

- Credit lines for on-lending to qualified SMEs by the partner institution.
- Guarantee arrangements for the partner institutions which provide their own funds to lending.
- Possible partially guaranteed credit lines.
- Technical assistance to banks at various levels...”<sup>17</sup>

General observations and learning related to the agri-sector included the following:

- SME finance demand is significant. Until very recently, the SME sector has been over-looked and under-funded. However, SME support and lending is slowly taking off, particularly in the agribusiness sector. There are 17 commercial banks in Afghanistan but all are risk averse – currently only doing construction and trade

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<sup>17</sup> [www.misfa.org.af](http://www.misfa.org.af) last accessed July 10, 2009

credit – no agriculture or agribusiness credit.<sup>18</sup> Very few are willing to consider agribusinesses.

- A common constraint identified in the value chain analysis was the lack of working capital for traders and processors. In fact, this constraint often becomes a critical cash flow issue for farmers, who receive partial payments for crops and end up financing the trader himself. There is significant scope for MFIs and SME banks to offer appropriate products to agri-traders.
- For each of the value chains analyzed in the following section there is some indication of informal financing between value chain actors. In reality, this practice could be greatly enhanced by creative traders and processors who see an opportunity to ensure quality supply of raw materials guaranteed by an input financing scheme. SME lenders and bankers should also be open to financing such arrangements.
- The importance of the SME processors and traders in agricultural value chains is significant. If their financial or non-financial constraints are not addressed, no amount of microfinance lending to the farmer/producer will be useful
- SME financing products include working capital financing, short-term overdrafts, investments in warehouses, pack houses, and machinery (equipment leasing and mortgages).

### **7.3 Appropriate Financing for Agriculture and Agribusiness**

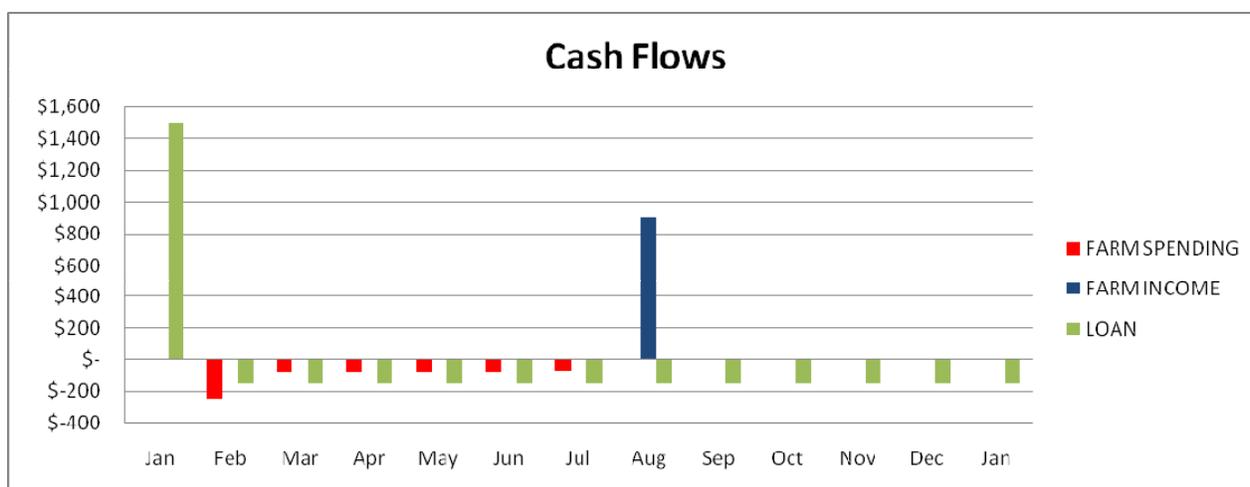
- For MFIs, agriculture and livestock account for between 15 – 70% of the total portfolio. The current strategy for MISFA and its partners is to encourage financial services and products to increase reach to the rural and agricultural market.
- Agriculture and livestock lending is the primary focus of only a few MFIs (BRAC, FMFB, ARMP, and CFA). Other MISFA partners are gradually expanding into new agricultural products.
- Rural financial services are expensive and risky to deliver; many institutions simply avoid working in rural areas. In order to serve the rural sector successfully, MFIs must look at managing their service delivery costs, particularly through creative service delivery channels, technology and the application of new and upcoming technology.
- Successful agricultural lenders tailor the product by analyzing household income and cash flows, and offering appropriate grace periods. Lending is not done by crop-specific analysis, but analyzing farm income as a whole.
- MFIs (FMFB and ARMP specifically) manage agricultural lending risks using a number of methods: analyzing entire household income, holding land title deeds as collateral, requiring personal guarantees if land title deeds are unavailable, for example. They also hire Loan Officers with an agricultural background from rural areas.

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<sup>18</sup> Interview with Ahmad Javaid Zeerak, AREDP, May 25, 2009

- ARMP (now part of FMFB) and CFA offer the most appropriate loan products for the agricultural sector in the two Northern provinces – flexible grace periods, loan terms ranging between 9 to 24 months, and flexible installments. CFA agricultural loans are repaid in two installments – the first at six months, the second at twelve months. However, most of MISFA’s partner MFI product offerings are inappropriate for agriculture – loan terms, interest rates and installment frequencies. Farmers had sharp criticism for BRAC’s weekly repayment expectations.
- The chart below illustrates typical farm income (the blue bar in August) with farm spending (the red bars from February through to July). The green lines illustrate the cash outflows assuming a loan, with regular monthly, weekly or bi-weekly installments characteristic of many MFIs in Afghanistan. The cash flow requirements for loan installments simply do not line up with farm liquidity.

**Figure 4: Cash Flows**



- Common financing products for agriculture include the following:
  - Seasonal loans for Working Capital (inputs, operating costs, harvest costs, etc.): this could be in the form of short-term overdrafts / lines of credit, if other farm cash flows permit;
  - Long-term capital and investment loans (land, irrigation infrastructure, and orchards); and
  - Leasing loans (equipment)

#### 7.4 Managing Credit Risks in Agriculture and Agribusiness

Previous sections have already explained some of the risks in agriculture and the agribusiness sector. These risks become credit risks to the MFI and SME banks in lending to the sector, and must be understood in order to be addressed. The most important issues to highlight are that agricultural and rural lending must be approached differently than traditional urban microfinance, and that the linkages with other agricultural service providers and businesses (e.g. processors) are vital to effective lending to the producer.

**Table 4: Risk Management**

Farming Risk	Risk Management by the Farmer	Risk Management by the MFI
Poor market opportunities for crops	<ul style="list-style-type: none"> <li>• Explore market potential as part of planning; negotiate contract farming opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborate with SME service providers to understand production demands and possible linkages</li> <li>• Ensure the farmer has access to markets, market information and opportunities as part of assessment</li> <li>• Explore options to have loan repayments deducted from sales sources of produce</li> <li>• Use value chain assessments as part of the lending strategy for the institution</li> </ul>
Inadequate or lack of access to extension, seed, irrigation, fertilizer, etc.	<ul style="list-style-type: none"> <li>• Access local, government and project resources including appropriate extension</li> </ul>	<ul style="list-style-type: none"> <li>• Develop Loan Officer expertise in agriculture</li> <li>• Ensure the farmer has access to extension services – and utilizes it effectively!</li> </ul>
Liquidity	<ul style="list-style-type: none"> <li>• Ensure that there are farm sales from either livestock or different crops throughout the year through good planning.</li> </ul>	<ul style="list-style-type: none"> <li>• Develop Loan Officer expertise in agriculture</li> <li>• Assess farm and household income comprehensively as a unit – cash flow based lending</li> </ul>
Exposure to failure or loss	<ul style="list-style-type: none"> <li>• Diversify some farm crops and activities to minimize failure or loss from a particular crop or activity (need to specialize or invest in high cash crops still important)</li> <li>• Maintain some financial or non-financial assets that can support losses in the short term</li> </ul>	<ul style="list-style-type: none"> <li>• Diversify the portfolio by activities, crops, and areas served</li> <li>• Ensure adequate Allowance for Loan Impairments is established to support any possible losses</li> <li>• Establish an internal “indemnity fund” for the MFI sector that would act as insurance in case of agricultural portfolio losses due to specified problems</li> </ul>
Natural disasters – drought, flood, pandemic disease	<ul style="list-style-type: none"> <li>• Maintain some financial or non-financial (the herd, other assets) reserves that can support any failure or disaster, at least in the short term</li> </ul>	<ul style="list-style-type: none"> <li>• Seek external support (government, other) to establish a Loan Guarantee Fund for drought, flood, and pandemic diseases</li> <li>• Ensure adequate Allowance for Loan Impairments is established to support any possible losses</li> </ul>

### **MFI Linkages With Agricultural Programs**

Many MFIs have been able to work collaboratively with their parent NGO agricultural projects or other partners.

- BRAC microfinance program has been able to link with BRAC's poultry, agriculture and horticulture programs
- BRAC has linked up with an FAO initiative whereby 10,000 farmers will be linked to BRAC's financial services activity
- Women for Women International linked with a MEDA project, Through The Garden Gate. The project provides horticultural extension, storage, marketing and business development linkages to women farmers of Parwan Province growing garden vegetables. MEDA provided technical assistance to WWI to develop a loan product suitable for the farmers. The 9 month loan term has 3 months grace period, with only monthly interest payments; the loan is repaid in equal installments during the final months of the loan term.
- CFA in Kunduz province offers financial services to partners and contacts from within CFA's development programs. The technical and marketing assistance from the development project have reduced the risks for the business, thereby ensuring the loan will be repaid.

### **7.5 Overview of Potential MISFA Partners for Agricultural Lending**

While there are a number of possible partnerships and interventions that may address the constraints, the table below lists some of the current players already offering agricultural products, and an assessment of their potential for expansion and work in Balk and Kunduz provinces. They were selected because of their primary interest and focus in agriculture, and their experience and presence in the two provinces already.

However, additional partners could also be explored, and several have been included in the table description below. Currently, some do not have appropriate products, but are operating in the selected areas or have significant partner NGO activities in the areas.

**Table 5 MISFA MFI Partners' Agricultural Lending Overview**

Retail Level Financial Sector Partner	Institutional Type	Products & Services (for Agriculture or Agribusiness)	Locations of Relevance	Managerial Capacity & Interest	Capital availability	Partnership Opportunities
<b>FMFB – Afghanistan (ARMP – Microfinance Window)</b>	First MicroFinance Bank, Afghanistan (FMFB Afghanistan) in 2004 received the first formal banking license to operate nationwide (license n° 001) from the Central Bank. It is registered as a limited liability company. Has 35,000 current clients (including 19,000 from ARMP) and 25,000 voluntary depositors. Over US \$36 million portfolio at the end of 2008. Offers both microfinance and SME financing products.	SME lending from \$5,000 - \$30,000.  Microfinance credit from \$200 - \$5,000  Individual and group methodologies. Loan products for livestock, agri-traders, micro-leasing, animal husbandry, agriculture with for seasonal activities with grace periods ranging from 1 month to 12 months. Repayments are monthly or seasonal. Rates are 1.25 – 1.30% flat per month	Active in both Balkh and Kunduz provinces (17 branches in 12 provinces)	Strong management and systems; have had past challenges with internal control and distance management in ARMP that need monitoring	Available – would welcome Technical Assistance, Loan Guarantee Fund for agriculture, risk-free pilot capital	Strong potential to lend to individual farmers, traders and SME processors; Probably less interested in partnerships or linkages with projects outside the Aga Khan family
<b>BRAC Afghanistan BANK and BRAC Microfinance</b>	BRAC Afghanistan Bank (BAB) is a full-fledged Commercial Bank with institutional shareholdings by BRAC, ShoreCap International Ltd. (SCI), USA, International Finance Corporation (IFC) - an investment wing of the World Bank and Triodos Bank of Netherlands. BRAC	Microfinance group loans are 48 weeks or 12 months in tenure with weekly and then weekly or monthly repayments; loan sizes range from \$100 – \$4,000.  Microfinance individual 12 month loan with monthly repayments. Loan sizes range from	Active in Balkh province through a rural branch network near Mazar city.	Strong capacity in general, but have had several management changes at BRAC Bank; some reluctance at offering flexible farming loan products; prefer to keep a rigid methodology with traditional weekly	Capital available but would welcome additional risk-free pilot capital	Prefer partnerships with their own BRAC programs, although they have recently agreed to partner with FAO in a large poultry growers' initiative

Retail Level Financial Sector Partner	Institutional Type	Products & Services (for Agriculture or Agribusiness)	Locations of Relevance	Managerial Capacity & Interest	Capital availability	Partnership Opportunities
	Afghanistan Bank is licensed by the Central Bank.	<p>\$1,000 - \$14,000</p> <p>Interest rates range from 17.5% - 20% flat per annum.</p> <p>Karza-e-Inkeshaf (Afghani): Loan Product for SME Business ranging from Afghani 500,000/= to Afghani 3,000,000/= for 1 Year</p> <p>Karza-e-Inkeshaf (USD): Loan Product for SME Business ranging from USD 10,000/= to USD 60,000/= for 1 Year</p>		repayments		
<b>CFA</b>	Child Fund Afghanistan (CFA) Microfinance Company was setup in Nov.2002 by the international NGO, Christian Children's Fund (CCF). CFA follows a solidarity group lending methodology and has already reached operational sustainability.	<p>Family Business Loan between \$240 - \$1,020 for 12 months with monthly repayments with 1.5% flat monthly rate</p> <p>Agricultural Loan (formerly winter loan) from \$240 - \$1,020 with 2 lump sum installments at 6 months and 12 months with 20% annual flat rate</p> <p>Loan sizes would need to increase to meet the range of farmers' needs.</p>	At present, the MFI operates in 12 districts of Kunduz, Takhar, Badakhshan and Baghlan.	Strong capacity – interest should be tested and explored further	Would welcome and need Technical Assistance and risk-free pilot capital to expand agricultural lending	Good partnership possibilities; they have already partnered with the parent NGO in a number of ways; well connected in the communities they work in.

Retail Level Financial Sector Partner	Institutional Type	Products & Services (for Agriculture or Agribusiness)	Locations of Relevance	Managerial Capacity & Interest	Capital availability	Partnership Opportunities
<b>FINCA</b>	FINCA Afghanistan was established in 2004 by the International NGO, FINCA International. The MFI has pioneered the development of shari'a compliant lending (murabaha) in Afghanistan. in 8 provinces in the West, North, Central and East of Afghanistan.	The MFI offers group and individual loans to private entrepreneurs and small business enterprises through a network of branches and market offices. Loan sizes range from \$400 - \$2,000 for a period of 5 – 12 months. Repayments are monthly and rates range between 2 – 3% monthly on a flat basis. Its products generally do not target agricultural activities.	FINCA is active in Kunduz and Balkh provinces	Strong senior management and interest in piloting agricultural loans in 2010 and onward	Would welcome risk-free pilot capital for agricultural lending and technical assistance	Good potential and openness to partnerships; have linked with a GTZ project in Kunduz for carpet weavers already
<b>Ariana Financial Services</b>	Ariana Financial Services (AFS) began operations as a program of Mercy Corps (MC) in May 2003 with an initial grant from the Bill & Melinda Gates Foundation. Early operations were focused exclusively on women in District 7 of Kabul city, the area hardest hit by fighting during the war. AFS currently operates in Kabul and Nangrahar	Have 3 loan products including 1 agro-loan product with a 24 month loan term and monthly repayments; loan size is \$400. Other loans range from \$100 - \$600 in size.  Interest rates range from 1% - 2% flat per month.	Not active in these areas, but could explore them.  AFS operations in Afghanistan will be expanded to include Laghman, Baghlan and Herat provinces.	Not interviewed or explored; loan products and sizes should be adapted if ag lending were expanded.	Interest needs to be explored and tested	Strong partnership potential for expansion, particularly because its parent NGO, Mercy Corps is very active in rural and agricultural development programs in northern Afghanistan. Good leadership and vision from Mercy Corps as well.

Retail Level Financial Sector Partner	Institutional Type	Products & Services (for Agriculture or Agribusiness)	Locations of Relevance	Managerial Capacity & Interest	Capital availability	Partnership Opportunities
<b>WOCCU</b>	Financial cooperative registration. Credit unions are formed and owned by their members. Only owner-members have access to the savings and loan services provided by each credit union.	Agricultural and business loans with flexible loan term; 2% per month declining interest; loan sizes range from \$100 - \$5,000	WOCCU has established 25 Islamic and Finance Cooperatives throughout the country, primarily in the North (active in Balkh province), South and Eastern provinces and is currently expanding to other parts of the country.	Fairly strong	Capital depends on savings mobilized by the cooperatives and whether any external capital will be accepted and at what levels and terms	Limited because of credit union member concept. However, it may be an option to explore for producer association memberships

## 8.0 VALUE CHAIN SELECTION, OVERVIEW AND ANALYSIS

A number of value chains were selected for high-level review and analysis in this study. Other value chains frequently mentioned as showing high potential included poultry, alfalfa, and various horticultural crops, but there was inadequate scope to include the many other options. The research and reviews did not take into account the end consumer of products, such as export consumers, local consumers or retailers selling value chain outputs and products. The intent was to understand the dynamics from the perspectives of inputs, production, trading and processing. As a result of this limited scope, the analysis may not be as conclusive as it might have been had the entire chain been reviewed.

Information was gathered for only the two provinces targeted in the study. Information was generally quite scattered, not necessarily very recent and its reliability was sometimes in question. The information below was provided by ASAP for the 2008 crop year. It is clear that not all Kunduz figures are included as Kunduz is a high producer for both melons and sesame. The Consultants cannot verify how the information was collected or its reliability, but will use this data for the purposes of this report. A number of other reports and resources listed in the bibliography were also used for the following analysis.

**Table 6: ASAP Data**

ASAP Data (Balkh and Kunduz)							
Province	District Name	#	By Ton				
		Sheep	Sesame	Melon	Almond	Rice	Wheat
Balkh	DEHDADI	28,781	34	6,370	158	0	16,450
	MAZAR-I-SHARIF	932,741	0	21	960	0	322
	NAHRI SHAHI	68,186	52	525	2,928	0	5,880
	MARMUL	37,000	0	14	4	0	120
	KHULM	74,000	20	800	1,470	0	1,180
	KALDAR	2,409	28	35	0	1,134	1,190
	SHOR TEPA	7,900	28	20	10	2,520	336
	DAWLAT ABAD	213,550	144	274	603	0	11,786
	BALKH	46,164	354	83	191	0	16,904
	CHAR BOLAK	139,080	495	21,000	648	0	5,563
	CHIMTAL	69,333	98	482	264	0	15,345
	CHAR KENT	72,624	13	35	0	0	1,050
	ZARI	58,560	60,000	0	0	0	1,649,760
	SHOLGARA	99,990	62	2,702	0	9,408	33,818
	Chahi		60	274	302	0	0
KISHINDEH	15,200	0	350	1	105	481	
<b>Total</b>		<b>1,865,518</b>	<b>61,387</b>	<b>32,985</b>	<b>7,538</b>	<b>13,167</b>	<b>1,760,184</b>
Kunduz	ALI ABAD	83,200			42	9,282	24,569
	CHAR DARAH	103,400			105	6,090	37,291
	DASHTI-I-ARCHI	93,700			32	12,180	54,301
	HAZRATI IMAM SAHIB	155,100			63	53,193	66,401
	KHAN ABAD	83,600			2	47,733	25,873
	( KUNDUZ )				32	15,330	23,485
	QALA-I-ZAL	104,700			84	3,192	26,343

<b>Total</b>	<b>623,700</b>	<b>0</b>	<b>0</b>	<b>359</b>	<b>147,000</b>	<b>258,264</b>
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In May 2009, the Ministry of Agriculture published an Agricultural Commodity Bulletin (Year 5, Volume 5) that lays out the most recent crop prices of wheat, fruits, vegetables and livestock. The interesting feature about this report is the comparison of current year's prices with the previous year's prices. There are significant differences that reflect the effects of the drought. In 2008, a severe drought resulted in a very small crop, a low supply of product and therefore a high product price. In 2009, there has been a large harvest, and because product is now plentiful, the price has dropped significantly.

The following sections map the chain and describe actors, services, and relationships. Some details on the quantities of product flows and marketing channels are provided, but not extensively. The relevant figures from the Commodity Bulletin have been used in the value chains' analyses that follow. Possible markets (domestic or export) were only briefly touched upon.

A financial lens was then overlaid on each value chain – looking at the informal financial flows between actors in the chain, and exploring other external access to financing such as microfinance institutions, banks, family members and community groups. Constraints, barriers and opportunities in the chain were then identified and prioritized. Each of the value chain discussions have been presented as a “stand-alone” piece. Common themes and patterns will be summarized in the final section of the report.

There are numerous crops grown and produced in Afghanistan, and the typical farm is very diverse. It was a challenging process to select the most appropriate and relevant value chains. The following criteria were considered in the selection process.

- The number of farmers involved was considered important. There is an interest in the scale and reach of impact.
- The potential for increased incomes for farmers was another important factor.
- Broad market demand was taken into account. Currently, many projects and organizations are involved in value chain development and activity in Afghanistan. Many focus on unique specialty crops such as roses (for rose oil), saffron, medicinal herbs and plants or mushrooms. Our selection focused on broad market demand both domestically and regionally, rather than very limited niche markets.
- Import substitution was considered, although the issue is a challenge. Many products grown and produced in Afghanistan are more expensive than imported goods. Imported goods are often highly subsidized or able to take advantage of mechanized and specialized production and processing. Most Afghans claim to prefer “Grown and produced in Afghanistan”, but we did not test this assumption, since it is price that generally drives choices in the end.
- Growth potential was also an important criterion to consider. If the level of processing and exporting increases in specific sectors (e.g. melons, oil processing, slaughter houses and flour mills), these become growth opportunities for farmers and producers.

- Export potential was selected because of the potential for high value crops (e.g. almonds, sheep by-products). Export earnings also increase the country's foreign exchange earnings.
- Value-added potential was also selected because of its importance to the overall Afghan economy, employment opportunities, and the increase of related business opportunities. The birth rate in Afghanistan is climbing at a high rate. Life expectancy is increasing with decreased conflict and wars and with increased health care for mothers and young children. Employing the growing population is an essential ingredient of both economic growth and income stability.

The ARIES project has produced a number of digital maps illustrating crop concentration that are illustrated in **Appendix 6**. Additional maps are available and are useful in understanding specific potential of various crops selected for specific interventions in the two provinces of Balkh and Kunduz.

### **8.1 Almond Value Chain Map and Analysis**

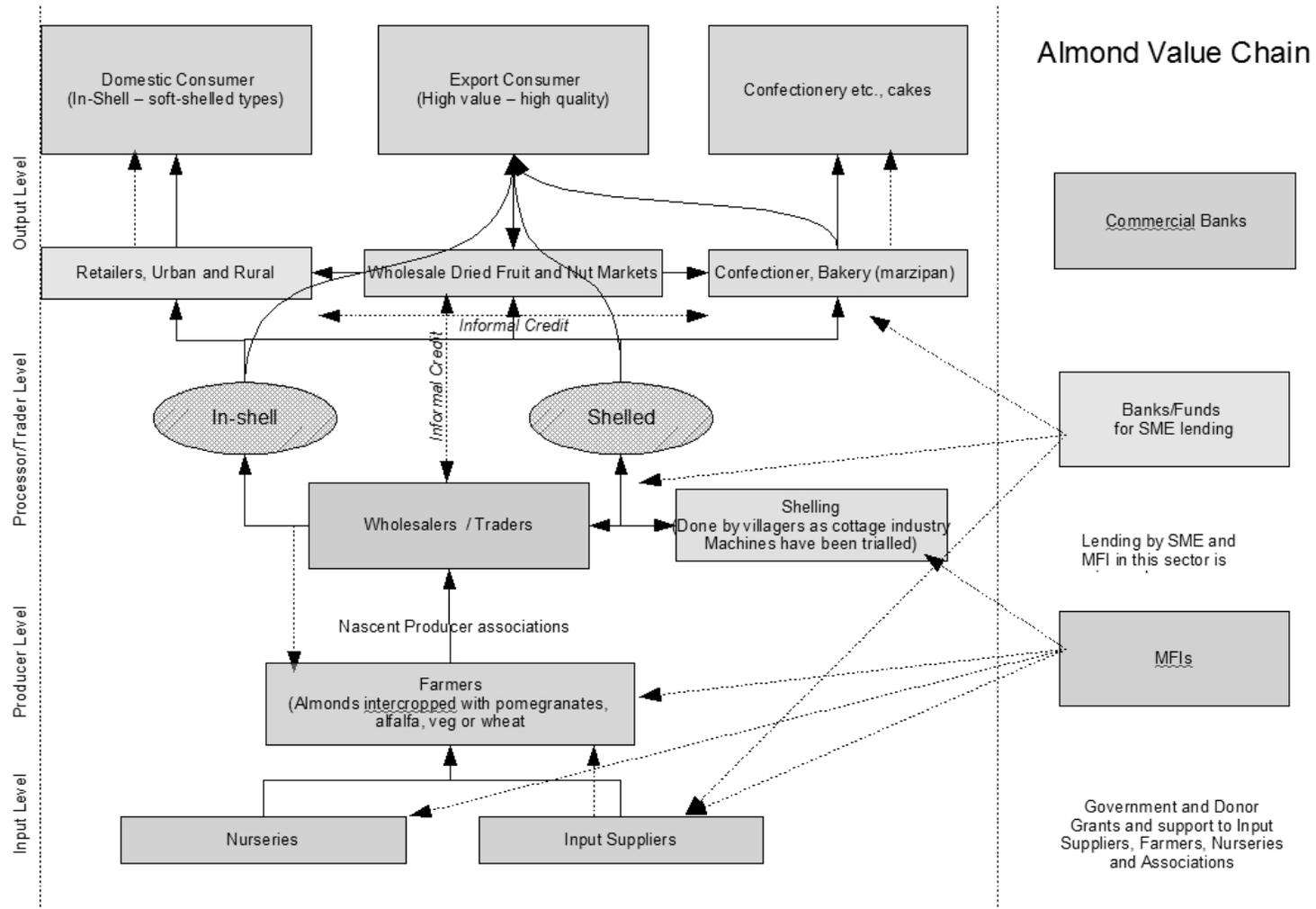
Almonds were chosen as one of the value chains for the following reasons:

- The primary reason for selecting the almond value chain is the potential for foreign exchange earnings through exports from Afghanistan.
- Almonds are one of the highest value cash crops after grapes and raisins.
- Almonds are estimated to earn nearly 8 times more than the current opium earnings, and trellised grapes nearly 9 times more than current opium earnings.<sup>19</sup> The value chains for dried fruit (apricots and raisins) are similar.
- Afghanistan's unique varieties and its climate and environment can produce a superb quality product that is in high demand in the region. A major problem is the lack of consistent product for marketing.

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<sup>19</sup> Comparative Net Income for Afghanistan Crops. Gary Kuhn, Roots of Peace. June 2009

**Figure 5: Almond Value Chain Financial Flows and Relationships**



**Table 7: Almond Value Chain Overview**

Value Chain Actor/ Participant	Key Findings
<p><b>Input Level</b></p> <p>Input supplier / service provider (trees, fertilizers, pesticides, water, extension)</p>	<ul style="list-style-type: none"> <li>• Foundation Stock of selected clones of marketable varieties has been established at Perennial Horticulture Development Centres at Kunduz and Dehdadi in Balkh.</li> <li>• Mother Stock Nurseries (MSN) are being planted and will be supplied from the Foundation Stock. They will supply bud wood and rootstocks to commercial nurseries.</li> <li>• Commercial nurseries to supply growers with saplings and are organized into associations round the MSNs.</li> <li>• Marketing of saplings is poorly organized</li> <li>• Private shopkeepers, agricultural depots, and farm stores sell pesticides, fertilizers, small tools and other inputs</li> <li>• Agricultural projects and government extension services provide training, extension and support services, but shopkeepers are often asked for advice</li> <li>• Water access and management is an issue</li> <li>• Cash payment is expected for goods and services; some informal, short-term credit may be offered by shopkeepers</li> </ul>
<p><b>Producer Level</b></p> <p>Farmers</p>	<ul style="list-style-type: none"> <li>• The typical Afghan farmer with land will have two jeribs in orchards of different types and varieties</li> <li>• Almond tree orchards are intercropped with pomegranates, alfalfa, wheat or other vegetables</li> <li>• Almonds take 5 years before producing any nuts and 7 years to reach full production; there are over 60 types grown in Afghanistan, but few true varieties; the most popular in domestic and export markets are the soft-shelled Satar Bai, Qahar Bai, Kilki Arous, Qambari, Kaf Mal, Khairu Din.</li> <li>• Alfalfa is an excellent livestock forage crop, harvested 3 times a season, high in protein, and replenishes the soil's nutrients.</li> <li>• National production is variously estimated at 16,000 to 38,000 t, of which some 5,500 t are from Balkh Province.</li> <li>• Most almonds are sold at harvest because farmers need cash.</li> <li>• The potential for net income per 1 hectare of almond product at 2,000 kgs produced is estimated at \$16,068.<sup>20</sup></li> <li>• A National Almond Producers' association (AAIDO) has been formed to promote the interests of</li> </ul>

<sup>20</sup> Comparative Net Income for Afghanistan Crops. Gary Kuhn, Roots of Peace. June 2009

	<p>growers and raise standards for exports. An almond growers' association has been set up in Mazar.</p> <ul style="list-style-type: none"> <li>• Farmers, who are able to store almonds, and have adequate cash and liquidity in the short-term, will be able to earn significant profits by selling almonds in the off-season, several months post-harvest. High export demand for good quality almonds also increases the farmer's profitability of this crop.</li> </ul>
<p><b>Processor/Trader Level</b></p> <p>Local Traders / Primary and Secondary Traders</p>	<ul style="list-style-type: none"> <li>• Local traders will buy from the farmer and sell to secondary wholesale traders for export or local markets</li> <li>• Some traders will purchase a crop in advance; farmers are paid a discounted advance, and sometimes wait for a year before completion of payment</li> <li>• Traders typically have low capacity for cleaning, sorting and packing</li> <li>• Most sales take place in cash.</li> <li>• Traders set the price of the product; product prices vary depending on season, quality and variety</li> <li>• Wholesale dried fruit and nut markets are common in large centers: Kabul, Kunduz, Mazar and other locations</li> </ul>
<p><b>Processor/Trader Level</b></p> <p>Processors / lead firms</p>	<ul style="list-style-type: none"> <li>• Nakul almond candy is made locally – 2-3 factories in Mazar</li> <li>• But no large-scale commercial almond processing takes place in-country; some almond shelling machines have been tested but rejected</li> <li>• Some almonds are shelled by hand, primarily as village cottage industry but not necessarily in the village of production</li> <li>• Almond sorting and grading is currently carried out by laborers in the market place. This is an informal service with little in terms of quality control</li> <li>• Shelled almonds have lower value than almonds in the shell</li> <li>• In 2003, \$3.7m almonds were exported in-shell and \$5.8m as kernels – 24% of Afghanistan's horticultural exports.</li> <li>• There is a Dried Fruits Processing Association for Northern Afghanistan.</li> </ul>
<p><b>Output Level</b></p> <p>Exports</p>	<ul style="list-style-type: none"> <li>• High quality Satar Bai and other soft-shell varieties are sold in shell for the snack market.</li> <li>• Much of the above is exported to India (est. 10-12 tons per year).</li> <li>• Indian buyers travel to Kabul and send local buyers to purchase from the local traders</li> <li>• It is estimated that 80% of Northern Afghan almonds go to Kabul and 20% direct to Pakistan.</li> <li>• Traders cite that 80 per cent of Afghan produced almonds are exported. In Kabul, approximately 50% of almonds are exported to India (India buys almost all soft shelled almonds from Kabul and all of the first quality kernels), 30 per cent to Pakistan (Pakistan buys only second quality kernels for their confectionary industry), and 20 per cent to local markets with a small quantity going to Iran and trial shipment to Saudi Arabia or UAE.</li> </ul>
<p><b>Output Level</b></p> <p>Domestic Consumers</p>	<ul style="list-style-type: none"> <li>• There is relatively high demand for unshelled almonds in the local market</li> <li>• Shelled almonds are processed for bakeries and confectioners in the domestic market</li> </ul>

**Table 8: Key Constraints, Possible Interventions and Financing Components in the Almond Value Chain**

Constraints and Barriers	Possible Interventions	Financing Component
1. Lack of consistent product to market. E.g. 2% bitter almonds are present in shelled product (kernels)	<ul style="list-style-type: none"> <li>• Farmers trained in benefits of planting clone material of marketable varieties</li> <li>• Orchards being replanted with stock emanating from Foundation through Mother Stock nurseries.</li> </ul>	<ul style="list-style-type: none"> <li>• Farmers need long-term financing to replant orchards. This is a challenge intervention for most microfinance and SME financing terms</li> </ul>
2. Irregular yields through poor pollination	<ul style="list-style-type: none"> <li>• Plant orchards of at least 4 varieties</li> <li>• Use bees</li> </ul>	
3. Grading inadequate, disorganized production, limited ability to add value in production area due to lack of infrastructure and volumes, lack of technical knowledge about processing. Sometimes stones and apricot pits are included with almonds	<ul style="list-style-type: none"> <li>• SME investment opportunity for traders or other agribusiness</li> <li>• Develop grading and consumer packaging</li> <li>• Process kernel to international standards</li> <li>• Add value to broken kernels by producing flakes, pieces and crushed kernels, almond oil either for industrial or consumer markets</li> </ul>	<ul style="list-style-type: none"> <li>• SME financing for warehouses, packaging and pack house facilities</li> <li>• SME investment and financing for almond processing</li> </ul>
4. No standards for quality in production or manufacturing, no internationally recognised certification authority	<ul style="list-style-type: none"> <li>• National problem for all fruit and nuts: being addressed through EPAA, ANHDO, AAIDO</li> </ul>	
5. Yields low - poor capacity and practices in pruning, pesticide use and harvesting techniques. Yields could increase from 1.4 t/ha to 2.1 t/ha.	<ul style="list-style-type: none"> <li>• Ongoing project and government support to producers through training and extension</li> </ul>	
6. Building and replenishing orchards is a long term, capital investment. No financial credit products are available for long-term farm investments	<ul style="list-style-type: none"> <li>• Agricultural loan products need to be developed to incentivize long-term farm investment while considering repayment from other farm sources in the short term</li> </ul>	<ul style="list-style-type: none"> <li>• MFIs and banks need to adapt loan product terms for long term farm investments</li> </ul>

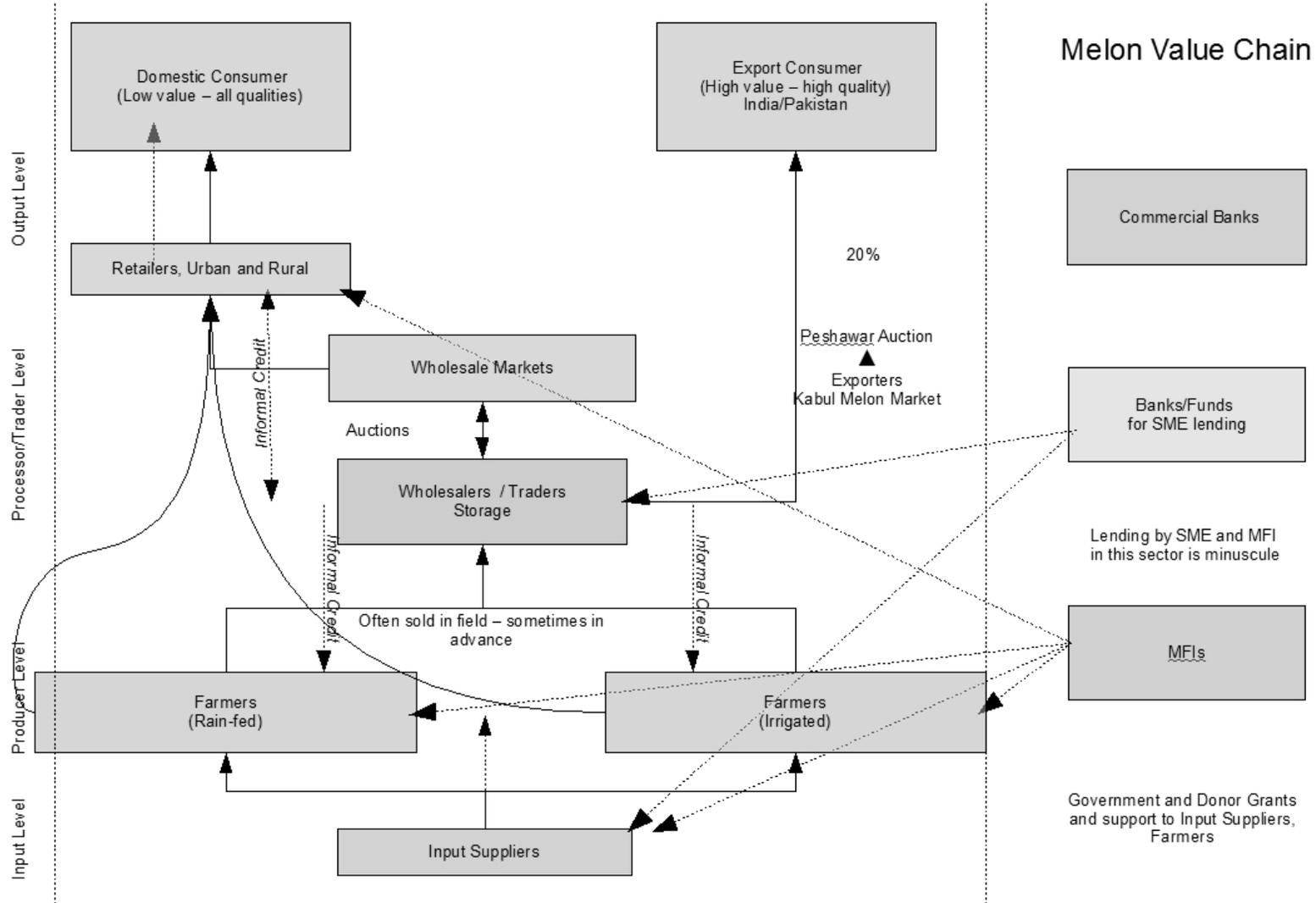
Constraints and Barriers	Possible Interventions	Financing Component
7. Afghanistan is facing severe competition from California in international markets for kernels. Prices are falling.	<ul style="list-style-type: none"> <li>• Merchandise shelling, packing and sorting</li> <li>• Replant with soft-shelled varieties for marketing in-shell</li> <li>• Differentiate and promote Afghan product</li> </ul>	
8. Traders have limited working capital to finance post-harvest purchases. The average wholesaler margin in Kabul is 18%. Payment methods vary but some traders receive 50 per cent of contract price in advance	<ul style="list-style-type: none"> <li>• SME lenders might adapt or develop loan product offerings that target more agribusiness traders</li> </ul>	<ul style="list-style-type: none"> <li>• SME and MFI lending to agribusiness traders for short term working capital</li> </ul>

## 8.2 Melon Value Chain Map and Analysis

Melons were selected as one of the value chains for analysis for the following reasons:

- Melons are high in demand in Afghanistan and represent a high value annual horticultural crop
- Although melons are consumed at the household level, they are grown primarily for their high cash crop value
- Both rain-fed and irrigated melons are grown: rain-fed are often considered better flavor
- In Balkh and Kunduz melons yield well, and soil and climate conditions are generally very favorable (hot and dry, with water when needed)
- Melons are grown for the local market (Kabul, Mazar and Kunduz are national market hubs) and also exported to Pakistan
- There are many melon varieties and in general, melons from Afghanistan are considered good in quality with a naturally sweet flavor, but control of melon fly without over-use of pesticides is a major problem

**Figure 6: Melon Value Chain Financial Flows and Relationships**



**Table 9: Melon Value Chain Overview**

Value chain Actor/Participant	Key Findings
<p><b>Input Level</b></p> <p>Input supplier / service provider (seed, fertilizers, irrigation, extension)</p>	<ul style="list-style-type: none"> <li>• Local melon seeds are available in the local markets near farming communities</li> <li>• Certified and quality seed is available through a variety of government and donor projects, farm stores and agricultural depot shops; extension services are available through government and donor project activities</li> <li>• Recent influx of the melon fly poses a major risk to the sector; acceptable methods of control are being developed</li> </ul>
<p><b>Producer Level</b></p> <p>Farmers</p>	<ul style="list-style-type: none"> <li>• Melons are a popular annual horticultural crop harvested between July – September in northern Afghanistan on both irrigated and rain-fed land. On irrigated land, they follow wheat, but on rain-fed land only single cropping is feasible</li> <li>• Melons may be used for household consumption, but they are primarily a cash crop for farmers</li> <li>• There is a high local and regional demand (Pakistan) for Afghanistan’s melons, and it is relatively low cost crop because of minimal labour (compared to wheat, rice and cotton). Profitability potential is fairly high for the melon farmer.<sup>21</sup></li> <li>• There are roughly 20 varieties of melon – and all have good growing conditions and good market demand in Afghanistan, but Arkani is particularly favored because of its long shelf-life and potential for export</li> <li>• Farmers need financing for seed inputs, fertilizers and pesticides for melon fly and other diseases; sometimes financing is available from the input supply shop keeper</li> </ul>
<p><b>Processor/Trader Level</b></p> <p>Local Traders/Wholesalers</p>	<ul style="list-style-type: none"> <li>• Farmers sell melons to local traders in a number of ways: some traders purchase the crop in advance from the farmer, or purchase it all at the time of harvest; other traders will receive melons on consignment for a fee after they are sold at auction in the market. There are risks here that the farmer loses the crop if it perishes while in transition.</li> <li>• Traders are responsible for transport costs which limits the farmer’s costs.</li> </ul>
<p><b>Processor/Trader Level</b></p>	<ul style="list-style-type: none"> <li>• Grading and packing facilities are few and far between in Afghanistan for melons; the majority of the crop is not adequately stored in cold storage but is transported to market directly from the farmer’s field</li> </ul>

<sup>21</sup> Melon Sorting and Packing MRRD Feasibility Study. On average the farmer in Balkh provinces earns between 20 - 55 AFN per Kabul ser (7 kgs) for melons, depending on the variety and the quality. This is 3 – 7 AFN per kilo. A trader’s margin will be 3 – 5 AFN per Kabul ser (7 kgs)

Value chain Actor/Participant	Key Findings
Grading and Packing Facility	<ul style="list-style-type: none"> <li>• There is a grading and packing facility in Mazar that is very small and testing the market for packed melons. According to a report (footnote) “Melons: As stated earlier, during the season (July – November), approximately 500 -700 tonnes of melons are traded a day in Mazar (fresh). The businessmen have links to farmers in Aqcha and Dehdadi districts and will procure their melons directly from these locations. The Company will form formal contracts with the farmers. The Company intends to ‘process’ approximately 28 tonnes of melon a week during the season for the two selected varieties – Arkani and Gin Tor - (mid Aug-mid Nov).”</li> </ul>
<b>Processor/Trader Level</b>  Local Traders / Primary and Secondary Traders	<ul style="list-style-type: none"> <li>• Melons are traded in Kabul, Kunduz and Mazar – as primary wholesale markets; there are roughly 20 traders that dominant the Kabul market</li> <li>• Product is auctioned directly off the lorry that has brought the product from the provinces; melons are then taken to the secondary markets for onward sales to neighborhood retailers, vendors and kiosks; other product is re-directed to other parts of the country or to Pakistan for sale in those areas</li> </ul>
<b>Output Level</b>  Domestic Consumers  Export Consumers	<ul style="list-style-type: none"> <li>• Retail markets and traders sell melons to household and commercial consumers (hotels, restaurants, etc.)</li> <li>• Pakistan and India</li> </ul>

**Table 10: Key Constraints, Possible Interventions and Financing Components of the Melon Value Chain**

Constraints and Barriers	Possible Interventions	Financing Components
1. The melon fly – recently come in from Tajikistan and Uzbekistan – represents a new potentially fatal blow to the sector. Prevention and treatment are limited.	<ul style="list-style-type: none"> <li>• Continued research and extension support to control the melon fly using IPM techniques and without exceeding pesticide MRLs.</li> </ul>	
2. There is very inadequate cold storage available in the country; there are also few grading and packing facilities.	<ul style="list-style-type: none"> <li>• Support and encourage growers and financiers to link with those grading and packing facilities that do exist</li> <li>• Link with IDEA-NEW project to increase packing and storage capacity</li> </ul>	<ul style="list-style-type: none"> <li>• SME financing of agribusiness sector, agri-support sector, e.g. transport, cold storage, etc.</li> </ul>
3. Prices are set in a number of ways – crops are sold in advance to a trader at a fixed price, crops are later auctioned in the market to the highest bidder, at other times crops are left by the farmer with the trader or middleman on consignment. Price is usually determined by quality and by supply.	<ul style="list-style-type: none"> <li>• Promote grower associations</li> <li>• Encourage fixed price contracts between packers and growers' associations.</li> </ul>	<ul style="list-style-type: none"> <li>• MFIs and SME lending could target associations through specific loan products for these groups, assuming all other due diligence is in place</li> </ul>
4. Traders and middlemen often have limited working capital to purchase and finance melon purchases. Farmers may often wait a long time before receiving final payment for their crop.	<ul style="list-style-type: none"> <li>• SME lenders might adapt or develop loan products that target working capital and financing to the traders in order to facilitate more efficient payment to farmers</li> </ul>	<ul style="list-style-type: none"> <li>• MFI and SME lending to traders and agri-wholesalers for working capital</li> </ul>

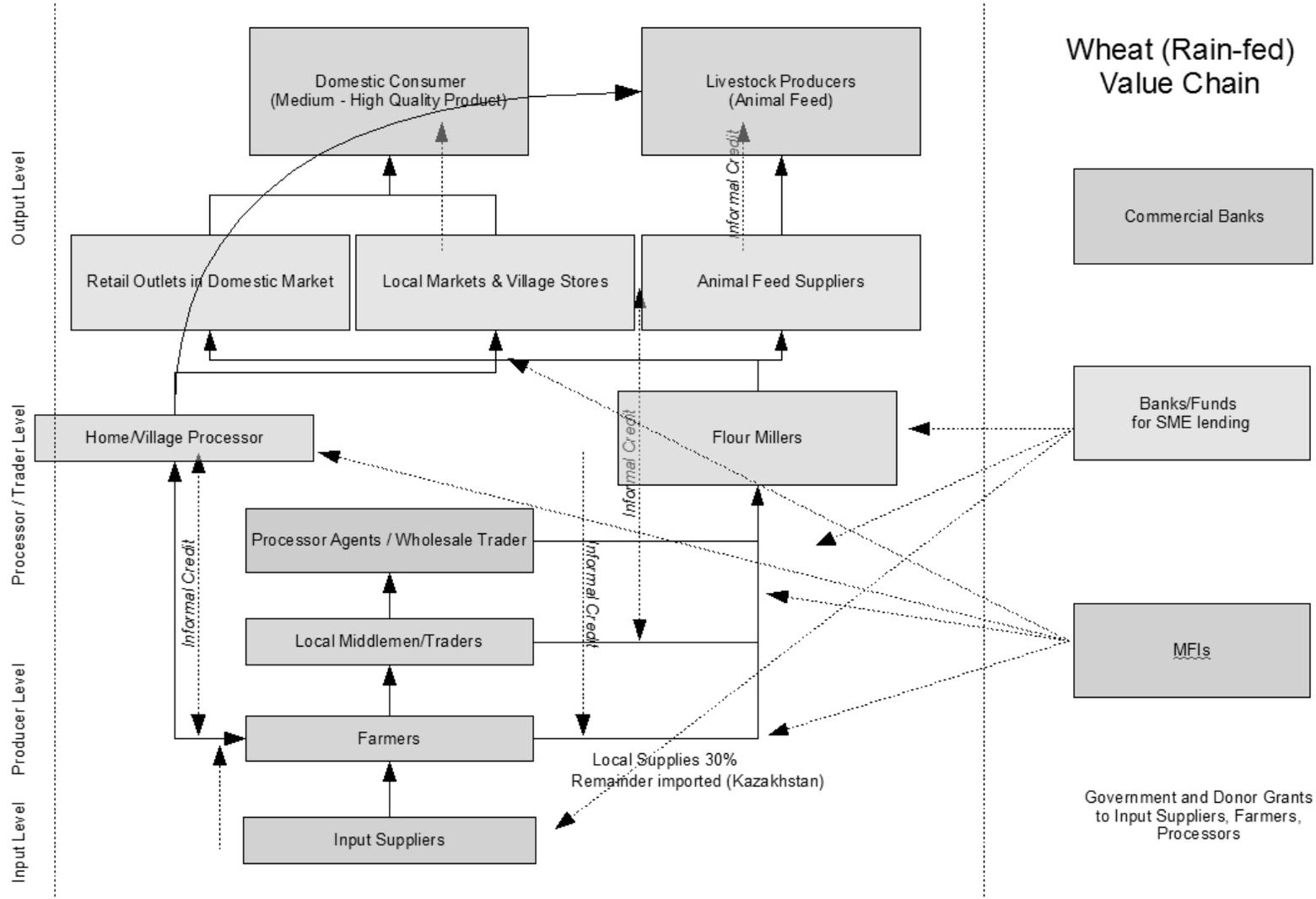
### 8.3 Wheat Value Chain and Analysis

Rain-fed wheat was selected as one of the value chains for analysis for the following reasons:

- Wheat flour is the country's staple food supply (for Afghan "nan" bread) and is critical to its food security; it is usually grown for household food security first.
- Both rain-fed and irrigated wheat are popular crops with high levels of production in both Balkh and Kunduz provinces
- The majority of farmers we spoke with grow some wheat on their farms; it is part of Afghan farming tradition. This attitude may change as more commercial thinking enters into the agricultural sector.
- Processing wheat from post-harvest to its final consumer product – flour and bread – is a value-added process that takes place through a variety of channels;
- There is also an animal feed by-product of chaff and broken kernels; wheat straw is also fed to animals.
- Increasing Afghanistan's wheat production will help to replace imports and international donations of both wheat and wheat flour. Afghanistan's wheat production is low-yielding and inefficient. Given the abundance of labour and shortage of irrigated land, it could be argued that farmers should concentrate on high-value crops with a large labour input. Wheat can be imported from Kazakhstan, US or Australia. However, this argument applies less to rain-fed wheat where the alternatives are not so obvious.
- Increasing productivity is the number one priority in the Master Plan of the Ministry of Agriculture

Other popular rain-fed crops included cotton, maize, sesame and chickpea. Each crop has its role in the Afghan agricultural economy, but only sesame was probed further in this study

**Figure 7: Wheat Value Chain Financial Flows and Relationships**



**Figure 8: Wheat Value Chain Overview**

Value chain Actor/Participant	Key Findings
<p><b>Input Level</b></p> <p>Input supplier / service provider (seed, fertilizers, extension)</p>	<ul style="list-style-type: none"> <li>• Local wheat seed is generally accessed in local markets;</li> <li>• Quality seed is also readily available through farm stores and agricultural depot shops, although the selling price may be a bit higher</li> <li>• For the record wheat year of 2003, only 4% of seed wheat was contributed by aid agencies</li> <li>• A new drought resistant wheat variety has been introduced in Afghanistan with considerable success; many of the range lands traditionally used for grazing have been tilled and are now planted with wheat. This has created pressure on land use, particularly for the Kuchi grazers who depend on natural range lands for their herds.</li> <li>• Fertilizers – both urea and DAP – increase wheat production</li> <li>• Some input suppliers provide occasional informal credit, but only to known, selected farmers and customers</li> <li>• Extension services for wheat are accessible through government, donor projects, agricultural depot stores and farm stores</li> </ul>
<p><b>Producer Level</b></p> <p>Farmers</p>	<ul style="list-style-type: none"> <li>• Irrigated wheat will be planted in early March and harvested in June; rice is the typical crop that follows irrigated wheat. Irrigated wheat is also an inter-crop in some of the fruit and nut orchards, although it competes for water to the detriment of the trees and generally the trees suffer. Rain-fed wheat will be planted in April and harvested in July or August</li> <li>• Rain-fed wheat yields of 30 – 40 ser/jerib (1.23 t/ha) were recorded by one farmer to be compared to 120 – 140 ser/jerib (4.55 t/ha) for irrigated wheat. The Master Plan gives yields of 1 t/ha and 3 t/ha respectively.</li> <li>• Retail market wheat prices are currently about 20 AFN per kilo in the north, down about 30 – 40% from last year (about 30 AFN per kilo). In a recent study conducted by Roots of Peace, a farmer earns \$320 net income on 1 hectare of wheat given a price of .32 cents per kg and 2,500 kilos produced from the 1 hectare.<sup>22</sup> This is the lowest of crops analyzed (opium at the current price is \$2,399 net income per hectare and almonds at \$16,060 per hectare)</li> <li>• The severe northern drought of 2008 created a huge shortage of wheat, but has been followed by a high yielding harvest in 2009.</li> </ul>

<sup>22</sup> Comparative Net Income from Afghanistan Crops. Gary Kuhn, Roots of Peace. June 2009

	<ul style="list-style-type: none"> <li>• Wheat is cut and swathed by hand by landless farm laborers – average daily wage is 200 AFN a day. The 2009 harvest is creating a labour shortage and at the time of the study, farm laborers were paid 400 AFN a day for harvesting wheat. Farmers also pay roughly 900 AFN an hour to rent a threshing machine and about 800 AFN an hour to hire a tractor.</li> <li>• There are few cash or credit demands for growing rain-fed wheat, with minimal inputs. It is labour intensive, particularly in the harvest, and cash for harvest labour will be required</li> </ul>
<p><b>Processor/Trader Level</b> Home and Village Processors</p>	<ul style="list-style-type: none"> <li>• For threshing (the process of loosening the edible part of cereal grain from the scaly, inedible chaff that surrounds it), the majority of small villages have local machines/ businesses. The charge for threshing is 900 AFN per hour including the tractor.</li> <li>• In the village wheat is still generally winnowed by hand (the separation of the grain from the chaff by wind); the chaff and broken grain is sold or used for animal feed.</li> <li>• Locally threshed wheat will be available to the farmer for household consumption, and also available to village traders and markets for local sales and consumers</li> <li>• Most villages have a small mill operated by a local farmer. Farmers store grain for home consumption and bring it to the mill for grinding into flour as required. The miller charges 20 AFN for 14 kg.</li> <li>• Farm households were found to be self-sufficient in wheat/flour for varying time spans according to area of crop, number in household and the season. During the drought, self-sufficiency was often less than 2 months.</li> </ul>
<p><b>Processor/Trader Level</b> Large-scale flour mill</p>	<ul style="list-style-type: none"> <li>• We visited a recently established flour mill in Mazar (since 2005); this large processor is looking to buy quantity stocks of Afghan wheat for the factory; the factory was only anticipating the second year of sales, the factory was financed with internal investment (rebuilt from 2002 – 2005) and a loan from ARFC</li> <li>• The Mazar flour mill imports roughly 70 - 75% of its wheat stock from Kazakhstan (good quality, low price because it comes from large mechanized farms) and the remaining 25 - 30% is sourced from Afghanistan</li> <li>• The plant currently has the capacity to process 160 metric tons of wheat every 24 hours; he has plans to improve capacity to produce 240 metric tons; the Kabul mill has a 140 metric ton capacity</li> <li>• Flour is produced primarily for internal consumption in Afghanistan; it is weighed and bagged at the mill – “Surazada” brand flour for homes.</li> <li>• Another old flour mill from the Soviet era remains in disrepair in Mazar; another flour mill in Kunduz is Pakistani-owned and operated; we were not given access to visit</li> <li>• Currently, the new flour mill in Mazar appoints purchasing agents (6) that go out to purchase stock during the harvest; wheat is purchased with cash; at times the mill also goes out to collect</li> </ul>

	<p>wheat from farmers.</p> <ul style="list-style-type: none"> <li>• Problems with quality and quantity led the Mazar flour mill owner to establish a seed company/outlet to promote quality wheat seed to improve Afghan-produced wheat; the foundation seeds are received from MAIL;</li> <li>• The mill has started the practice of supplying farmers with fertilizers and inputs, and then deducting the advances from wheat sales; FAO will provide the technical assistance to farmers; the owner thinks that he can work with 10,000 Afghan farmers in such a scheme – he is interested in supporting the Afghanistan agricultural sector</li> <li>• The mill owner believes that there is potential for other such producer – grower schemes but most business people are not interested; they are too pre-occupied with their own profits.</li> <li>• The flour mill owner banks at AIB (partner of SME lending with MISFA) and Kabul Bank</li> <li>• Processing wheat for flour produces the by-product, bran; bran is also used domestically, but bran, chaff and broken wheat are sold as animal feed by the mill</li> </ul>
<p><b>Processor/Trader Level</b> Local Traders / Primary and Secondary Traders</p>	<ul style="list-style-type: none"> <li>• Local traders and purchasing agents will buy from the farmer the unprocessed product for processing at the large factory</li> <li>• Wheat flour is sold in local and Kabul market wholesalers and traders – they sell to other secondary traders and retailers the flour for local sale and consumption</li> </ul>
<p><b>Output Level</b> Domestic Consumers</p>	<ul style="list-style-type: none"> <li>• Wheat flour is one of the staples of the Afghan diet; Afghans prefer locally grown and produced food when possible</li> </ul>

**Table 11: Key Constraints, Possible Interventions and Financing Components of the Wheat Value Chain**

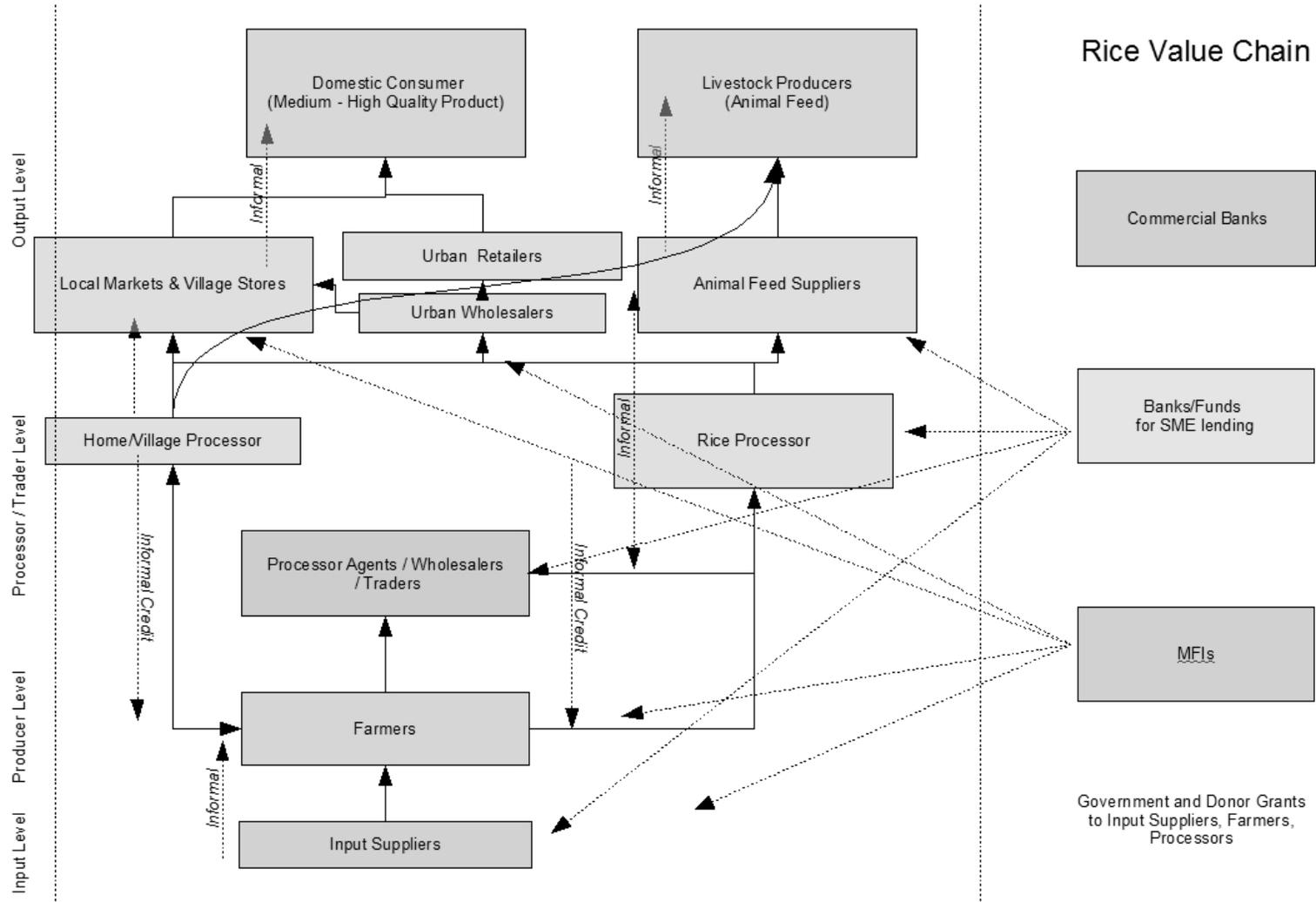
Constraints and Barriers	Possible Interventions	Financing Components
1. The farmer has little access to price information and to price negotiation. Without good storage, he must sell at harvest.	<ul style="list-style-type: none"> <li>• Change cropping from commodity crops</li> <li>• Farmer can only increase profit by increasing yields and reducing costs of production</li> <li>• Mechanization on farms to reduce cost of production</li> </ul>	<ul style="list-style-type: none"> <li>• Financing for farmers to invest in low-cost technologies to improve yields / reduce costs (e.g. micro-irrigation, modern implements)</li> </ul>
2. The processors and traders set the price, largely based on supply and demand of imported wheat and the quality and quantity of the local crop.	<ul style="list-style-type: none"> <li>• Improved seed quality to increase yields</li> </ul>	
3. Building successful supply linkages for the flour mill including financing farmers would help the factory to increase production, and to increase its Afghan wheat inputs.	<ul style="list-style-type: none"> <li>• Value chain financing from the processor</li> </ul>	<ul style="list-style-type: none"> <li>• Finance agri-processors to finance their producers, including contract farming</li> <li>• MFIs finance farmers directly, based on sales contracts with the agro-processors</li> </ul>
4. The flour mill may have limited working capital to finance post-harvest purchases.	<ul style="list-style-type: none"> <li>• SME lenders might adapt or develop loan products that target working capital financing to the processor in order to support him to finance the farmers</li> </ul>	<ul style="list-style-type: none"> <li>• Additional financing and loans to agri-processors for working capital.</li> </ul>

## 8.4 Rice Value Chain and Analysis

Rice was selected as one of the value chains for several reasons.

- Rice is one of the staple carbohydrates in Afghanistan, second only to bread made from wheat flour.
- Rice is grown and harvested extensively in Kunduz, and is commonly one of the 2 or 3 crops grown on irrigated farm land in the province.
- Local production and processing is an attractive value-added sector that can replace imported rice from Pakistan or India. Some estimate that Afghanistan imports 2,000 tons of rice a day.
- A lot of rice is milled in local rural villages with very basic, low-capacity processing. However, the study team was fortunate to visit a newly constructed rice factory just outside Kunduz city that took rice through all stages of processing, from husking, boiling, and roasting to polishing. The factory had been established in 2008 and had capacity to process 4,000 metric tons in a 24 hour period. Rice is packed in 7 ser (Kabul ser) sacks for distribution to national markets.

**Figure 9: Rice Value Chain Financial Flows and Relationships**



**Table 12: Rice Value Chain Overview**

Value Chain Actor/Participant	Key Findings
<p><b>Input Level</b></p> <p>Input supplier / service provider (seed, fertilizers, irrigation, extension)</p>	<ul style="list-style-type: none"> <li>• Rice seed is generally accessed in local markets, and set for germination in early June</li> <li>• Quality seed is also readily available through farm stores and agricultural depot shops, although the selling price may be a bit higher</li> <li>• Other inputs, fertilizer, crop protection, are available in the bazaar.</li> <li>• Irrigation infrastructure and water management are important – farmers at the tail of an irrigation system have to fight for their rights</li> </ul>
<p><b>Producer Level</b></p> <p>Farmer</p>	<ul style="list-style-type: none"> <li>• Rice is planted on irrigated lands as the second crop of the season, after winter wheat has been harvested.</li> <li>• National Afghan rice yields hover around 2t/ha, but trials supported by the Aga Khan Foundation have seen rice yields reaching an average of 10.2 t/ha in SRI (System of Rice Intensification) plots, compared to 5.7 t/ha in control plots.</li> <li>• The Afghan farmers met during the study had between 5 – 20 jeribs of irrigated land under cultivation. If even 5 jeribs is planted with rice, and produces 60 ser per Jerib, this is an average production of 300 ser per farmer. The price of rice is about 250 AFN/ser (36 AFN/kg) at harvest, but increases with storage to 400-450 AFN/ser (57 AFN/kg). Thus farm income from 5 jeribs of rice is \$1,500 - \$2,500 at current yields, but could increase to \$10,000 with improved cultivation practices and storage.</li> <li>• If irrigated land is available, the farmer plants rice as a staple crop for home consumption first; surpluses are sold in the market</li> <li>• There are few cash or credit demands for growing rice, with minimal inputs. It is labour intensive, particularly at planting and harvest, and cash for harvest labour will be required.</li> <li>• Like sheep, storing rice is a form of banking for farmers.</li> </ul>
<p><b>Processor/Trader Level</b></p> <p>Home and Village Processors / Large processors</p>	<ul style="list-style-type: none"> <li>• The majority of small villages will have a local miller where rice is husked following the harvest. The process takes 2 weeks.</li> <li>• Locally husked rice will be available to the farmer for household consumption, and also available to village traders and markets for local sales and consumers</li> <li>• The rice factory processes rice in 24 hours.</li> <li>• The large processor buys paddies at harvest for the factory; the factory was only anticipating the second year of sales, with limited capital (the factory was financed with internal investment and capital only – no external borrowing)</li> </ul>

	<ul style="list-style-type: none"> <li>• Rice chaff, broken kernels and other by-product are burned to fire the plant or sold or used for animal feed</li> <li>• Currently, the factory has purchasing agents that go out to purchase stock during the harvest; paddy is purchased with cash;</li> <li>• Farmers also take paddies to the factory for sale.</li> <li>• At times, rice is paid for by the factory in-kind with the finished product. 80 ser of paddy is purchased with 9 ser of polished rice.</li> <li>• Paddy costs 100-150 AFN/ser. Polished rice is worth 300-350 AFN/ser.</li> <li>• In peak season, the factory employs 70-80 workers</li> </ul>
<p><b>Processor/Trader Level</b></p> <p>Local Traders / Primary and Secondary Traders</p>	<ul style="list-style-type: none"> <li>• Local traders will buy from the farmer the unprocessed paddy for processing at a large factory</li> <li>• Primary and secondary traders will purchase stock from the factory for local markets and the Kabul market, displacing imported rice from neighboring countries</li> <li>• The large urban markets act as wholesalers for urban retailers and also for secondary city traders that come to Kabul and elsewhere to purchase goods from other regions</li> <li>• Proximity of the plant to Tajikistan and Uzbekistan create export markets should the local market be saturated</li> </ul>
<p><b>Output Level</b></p> <p>Domestic Consumers</p>	<ul style="list-style-type: none"> <li>• Rice is one of the staple foods in Afghanistan and there is general preference for good quality Afghan rice over imported rice;</li> <li>• Afghans also prefer to purchase locally grown produce.</li> <li>• In April 2009 retail price of local rice was 36 AFN/kg and imported was 58 AFN/kg (c.f. price of polished rice above)</li> </ul>

**Table 13: Key Constraints, Possible Interventions and Financing Components of the Rice Value Chain**

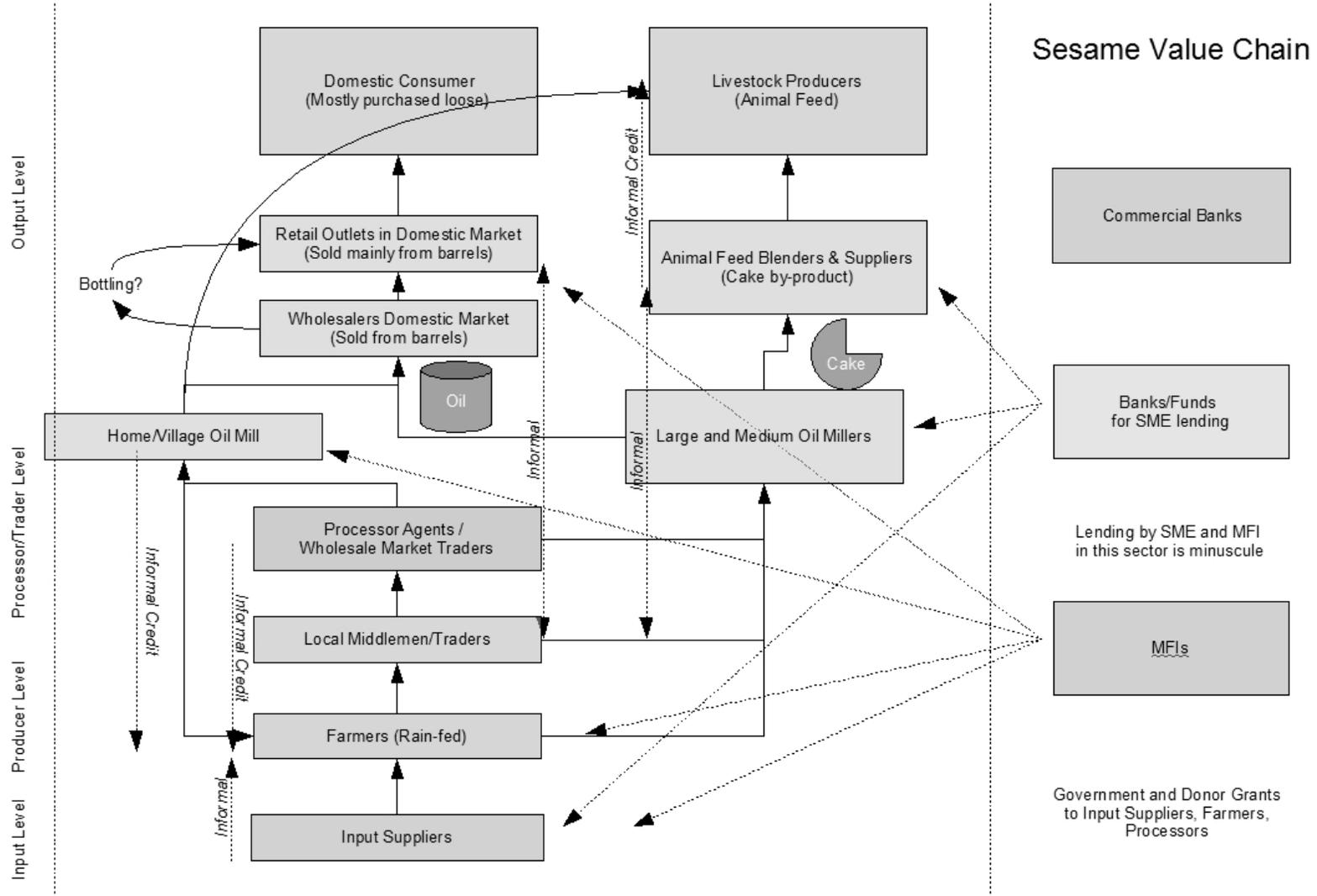
Constraints and Barriers	Possible Interventions	Financing Components
1. Farmers have little access to price information and to price negotiation; the processor and the trader will set the price, largely based on supply and demand	<ul style="list-style-type: none"> <li>• Village associations of rice growers negotiate prices</li> <li>• Build safe storage to spread marketing season</li> </ul>	<ul style="list-style-type: none"> <li>• Financing associations through MFIs or SME bankers – this would be a revised type of loan product for the institution. Associations could build storage capacity for members.</li> </ul>
2. Seasonal availability of water	<ul style="list-style-type: none"> <li>• River basin management</li> </ul>	
3. Building successful supply linkages for the rice processing factory – to help it increase production; a system of providing inputs and financing production and harvest costs by the factory and reducing from the final payment to the farmer might strengthen the factory's ability to work nearer to capacity	<ul style="list-style-type: none"> <li>• Value chain financing from the processor</li> </ul>	<ul style="list-style-type: none"> <li>• Financing agri-processors to undertake value chain financing</li> <li>• Financing producers, based on firm sales contracts with the processor</li> </ul>
4. Traders have limited working capital to finance post-harvest purchases.	<ul style="list-style-type: none"> <li>• SME lenders might adapt or develop loan products that target more agribusiness traders; this might facilitate cash payment upfront for any harvest purchases, and no delays in payments to farmers.</li> </ul>	<ul style="list-style-type: none"> <li>• Financing to agri-traders</li> </ul>
5. Farmers have limited capital for household expenses if rice is stored	<ul style="list-style-type: none"> <li>• Warehouse receipt system</li> </ul>	<ul style="list-style-type: none"> <li>• Banks and MFIs recognize stored commodity as an asset, and lend to farmers against that asset</li> </ul>

## 8.5 Sesame Seed Value Chain and Analysis

The sesame seed sector was selected for additional analysis for many reasons. It is typical of other oil seed crops like cotton and flax (linseed). Sesame is predominately a dry-land (rain-fed) crop and sown and harvested once a year. However, it is also one of several alternative rain-fed crops: wheat, melons, chickpeas, etc. However, the primary reasons are listed below:

- Value-added processing
- High market demand for sesame seed oil
- Nutritious waste by-product for animal feed (sheep, livestock, poultry)

**Figure 10: Sesame Value Chain Financial Flows and Relationships**



**Table 14: Sesame Value Chain Overview**

Value Chain Actor/Participant	Key Findings
<b>Input Level</b> Input supplier / service provider	<ul style="list-style-type: none"> <li>Local seed shops and fertilizer inputs; some may offer financing to farmers for a very short term, informal basis</li> </ul>
<b>Producer Level</b> Farmer	<ul style="list-style-type: none"> <li>Yields quoted from one farmer were 1.75 t/ha but this seems high and must have been irrigated.</li> <li>Farm gate prices were given as 500 – 600 AFN/ser (\$1,571/ton = \$2,750/ha). On this basis, farm income per jerib would be comparable to irrigated rice. (But the oil mill in Kunduz was buying sesame at 220 – 240 AFN/ser. The price in Balkh seed market was 497 AFN/ser)</li> <li>Sesame is predominately a crop of rain-fed land</li> <li>Growing an oil seed crop is important for the farmer; the oil is a source of cooking fuel for household consumption and the cake is a nutritious feed for his livestock</li> <li>Farmers may take their supply of sesame seed directly to the oil presses</li> </ul>
<b>Processor/Trader Level</b> Local Traders / Primary and Secondary Traders	<ul style="list-style-type: none"> <li>Other farmers may take sell their sesame seed to traders and merchants in the market</li> <li>Most traders have limited working capital to purchase sesame seed oil; other traders will purchase stock directly from the farmer's field</li> </ul>
<b>Processor/Trader Level</b> Processors / lead firms	<ul style="list-style-type: none"> <li>The vast majority of oil presses are small operators with 1 or 2 machines that produce several barrels (220 liters) of oil in a 24 hour period. One mill claimed 6 barrels output in 24 hours, a larger mill was aiming for 100 barrels per day.</li> <li>The oil mill in Kunduz was buying sesame at 220 – 240 AFN/ser</li> <li>Yield was given as 2.5 – 3.0 l/ser valued at 450 AFN/ser. The output of cake was valued at 160 AFN/ser. (Linseed prices were higher, but the oil yield lower)</li> <li>The factory may have working capital to buy directly from farmers, or may buy from merchants or traders as capital permits. One miller stated that 30% of customers took up to one month credit.</li> <li>There is high demand for sesame oil and traders usually buy directly from the factor in barrels</li> </ul>
<b>Output Level</b>	<ul style="list-style-type: none"> <li>Wholesalers will sell sesame seed oil in bulk to retailers; or to retail customers directly, depending on their location</li> <li>It is stated by Balkh Chamber of Commerce that 7,500 t of Sesame are traded annually and of</li> </ul>

Wholesalers / Retailers Export Markets	this some 5,000 to 6,000 t are exported to Iran and Turkey. But ASAP data states that 61,387 t of Sesame are produced in Balkh. We have no data for Kunduz.
<b>Output Level</b> Domestic Consumers	<ul style="list-style-type: none"> <li>• There is high demand for sesame seed oil in the Afghan market, displacing imported cooking oil</li> </ul>

**Table 15: Key Constraints, Possible Interventions and Financing Components of the Sesame Value Chain**

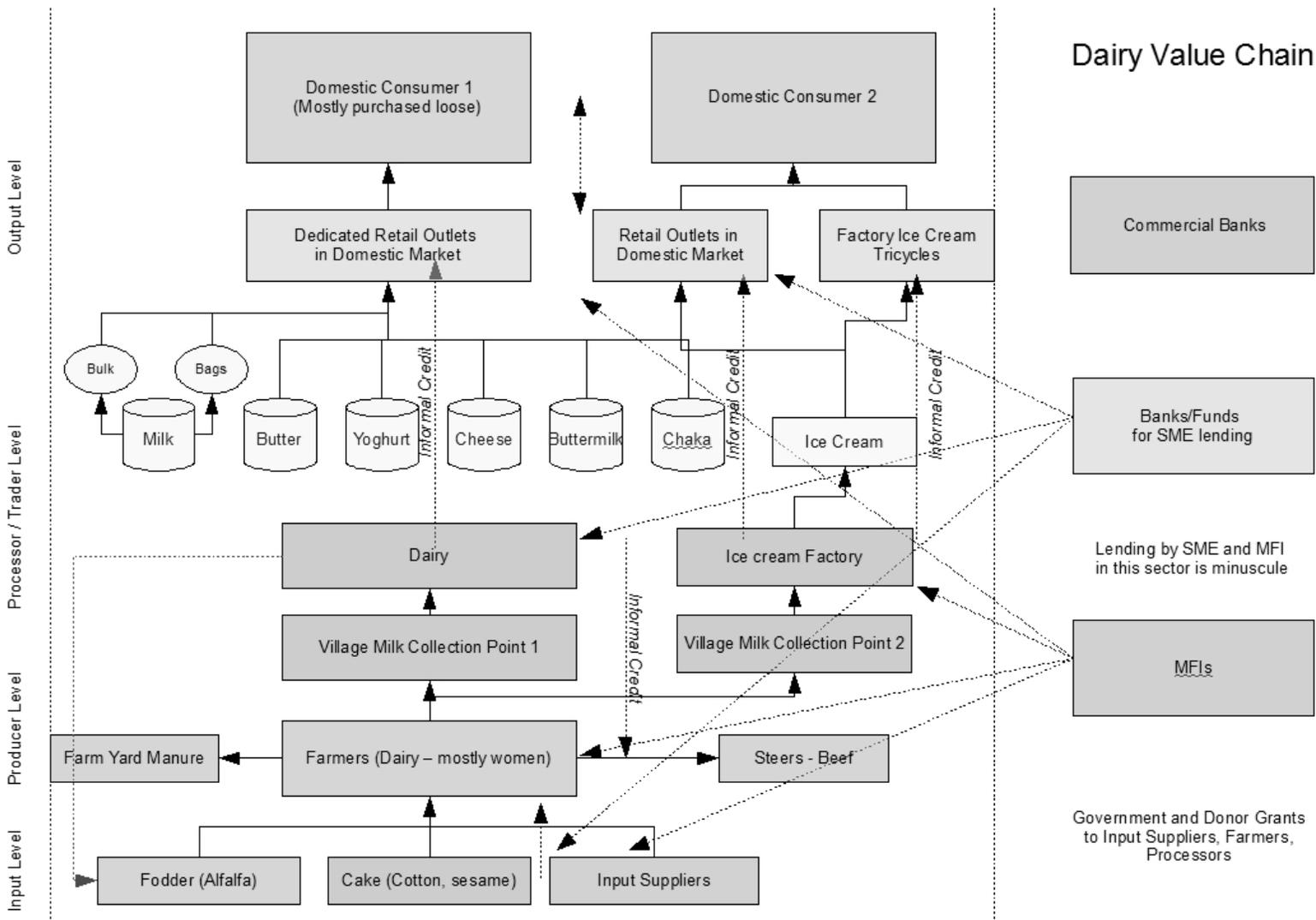
Constraints and Barriers	Possible Interventions	Financing Components
1. There are no packaging and bottling facilities: only capacity for selling the oil product by bulk quantity in large oil drums	<ul style="list-style-type: none"> <li>• SME investment in this level of processing, packaging and market sesame oil is a good business opportunity; financing is also a necessary intervention</li> </ul>	<ul style="list-style-type: none"> <li>• SME lending to processing and packaging industry in the country</li> </ul>
2. The price of sesame seed is set by traders, to a large extent established by supply and demand. The farmer has little to no negotiating influence in setting prices.	<ul style="list-style-type: none"> <li>• Producer association development that eventually begin to fix and influence prices of their products.</li> </ul>	<ul style="list-style-type: none"> <li>• SME financing to storage, warehouse and inventory facilities would allow farmer to hold and wait for optimal sales timing</li> </ul>
3. There are limited storage facilities for post-harvest sesame, at the farmer level or the trader. This implies that sesame is sold immediately after the harvest when supply is high and the price is at its lowest.	<ul style="list-style-type: none"> <li>• An SME investment to a farmer, a trader or a producer association for post-harvest sesame seed storage</li> </ul>	<ul style="list-style-type: none"> <li>• SME financing to storage, warehouse and inventory facilities</li> </ul>
4. Processors and traders have limited working capital to invest in their equipment, machinery, or purchasing stock.	<ul style="list-style-type: none"> <li>• SME loan products targeting this agribusiness sector with appropriate terms and conditions. (FMFB had one sesame oil client with a \$30,000 loan.)</li> </ul>	<ul style="list-style-type: none"> <li>• SME financing to agri-traders</li> </ul>
5. Farmers have limited working capital for planting and harvesting sesame. They need immediate payment on sale of the harvest at a price that covers all their costs.	<ul style="list-style-type: none"> <li>• Agricultural credit from MFIs or value chain financing from an oil press factory would facilitate cash flows for farmers. (Lenders should bear in mind that the season for irrigated sesame following wheat is much later than for single-crop rain-fed sesame.)</li> </ul>	<ul style="list-style-type: none"> <li>• Appropriately designed loan products from MFIs for farmer working capital (especially for planting and harvest expenses)</li> </ul>

## 8.6 Dairy Value Chain and Analysis

Rice was chosen as a value chain for the following reasons.

- Both Balkh and Kunduz provinces have high production of dairy livestock and several dairies that take in milk for processing, packaging and the production of milk by-products such as yogurt, cheese, butter, buttermilk and chaka (an Afghan specialty). These products are good quality and much preferred in the local market over Pakistani imports. Both provinces also have strong crop production so that feed – including high quality forage like alfalfa – is readily available.
- Dairy is also a sector of interest because traditionally the women of the household are responsible for taking care of animals and milking them. The sale of milk – whether to neighbors or a dairy – usually becomes income in the hands of women.

**Figure 11: Value Chain Financial Flows and Relationships of the Dairy Value Chain**



**Table 16: Dairy Value Chain Overview**

Value Chain Actor/ Participant	Key Findings
<p><b>Input Level</b></p> <p>Input supplier / service provider (veterinarian services, animal feed, artificial insemination services)</p>	<ul style="list-style-type: none"> <li>• Veterinarian services are readily available through Veterinary Field Units (VFUs), AgDepots, farm stores, private commercial shops</li> <li>• The FAO dairies we visited provide a valuable service to producers – not only as processors, but also as service providers</li> <li>• Quantity and quality of forage impacts milk yield</li> </ul>
<p><b>Producer Level</b></p> <p>Farm household</p>	<ul style="list-style-type: none"> <li>• Indigenous cows produce about 3 – 5 liters a day; cows that have been inter-bred with high quality breeds produce up to 18 liters a day; much depends on the quality of forage available</li> <li>• Cows produce less in winter because the quality and quantity of feed is significantly less</li> <li>• Most Afghans –in urban centers 30% – have a cow to produce milk for household consumption. The largest herd encountered was 12 cows.</li> <li>• Zero grazing</li> <li>• Dairy livestock is generally the responsibility of the women in the family, but livestock is bought and sold by the men</li> <li>• Farmers in cooperatives or unions affiliated to dairy</li> <li>• Many farmers recovering from the 2008 drought when they were forced to sell cows for very little money; they are currently restocking at 2 – 3 times the price they sold for a year ago.</li> <li>• 60% of herd is improved stock averaging 15 liters/day</li> </ul>
<p><b>Processor Level</b></p> <p>Dairies</p>	<ul style="list-style-type: none"> <li>• Collection centers in villages, but no refrigerated collection</li> <li>• Clean modern equipment – all milk pasteurized</li> <li>• Working under capacity – Balkh dairy at 50%.</li> <li>• Producers represented on dairy management</li> <li>• Producers stated that they have some control over price paid to them for milk</li> </ul>
<p><b>Output Level</b></p> <p>Milk Shops – owned by dairy</p>	<ul style="list-style-type: none"> <li>• Sell out of fresh milk daily by 10 a.m. Yoghurt stock turns over every 2-3 days</li> <li>• Bulk milk (sold loose): 22 AFN/liter Milk packaged in pouch: 28 AFN/liter</li> <li>• Retail Milk prices for April in the May 2009 Price Bulletin put out by MAIL were 25 AFN/litre in Mazar and 18 AFN/litre in Kunduz</li> </ul>

**Table 17: Key Constraints, Possible Interventions and Financing Components of the Dairy Value Chain**

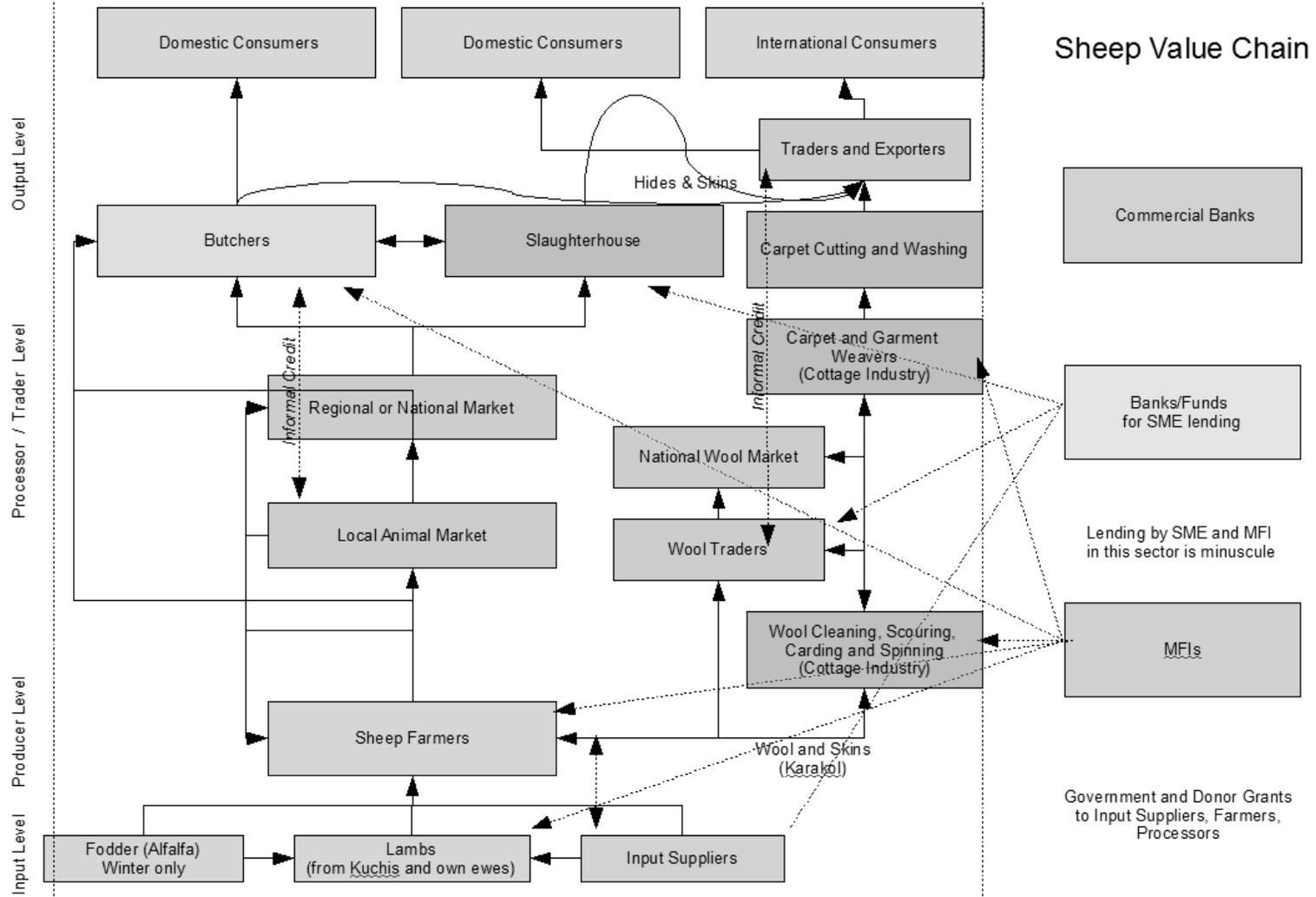
Constraints and Barriers	Possible Interventions	Financing Components
1. Competition from Pakistan and Uzbekistan on cheap imports		
2. Dairies running below capacity due to insufficient milk, especially in winter	<ul style="list-style-type: none"> <li>• Restocking of herds</li> <li>• Further distribution of high yielding cows</li> <li>• Training in animal nutrition and business training in feed:milk ratio</li> </ul>	<ul style="list-style-type: none"> <li>• MFIs offer longer term financing for purchase of livestock</li> </ul>
3. Milk products are not core to Afghan diet	<ul style="list-style-type: none"> <li>• Promotion</li> </ul>	
4. Producers could produce more with more feed	<ul style="list-style-type: none"> <li>• Loan to purchase extra feed – especially in winter</li> <li>• Education component on importance of adequate diet to dairy animals</li> </ul>	<ul style="list-style-type: none"> <li>• Appropriate MFI loan products for working capital for livestock</li> </ul>
5. Cost of loan repayment collection	<ul style="list-style-type: none"> <li>• Deduct from milk payments at dairy</li> </ul>	<ul style="list-style-type: none"> <li>• Value chain financing by linking a financial service provider to the processor and arranging for loan collection from the sale of product</li> </ul>
6. Farmers are weak sellers – milk 10 AFN/litre	<ul style="list-style-type: none"> <li>• More dairies and unions – milk is then sold at 22 AFN/litre</li> </ul>	<ul style="list-style-type: none"> <li>• SME financing of dairies, milk processing equipment, and packaging</li> </ul>
7. Lack of packaging machinery and materials at dairy	<ul style="list-style-type: none"> <li>• SME dairy investments</li> </ul>	<ul style="list-style-type: none"> <li>• SME financing of dairies, milk processing equipment, and packaging</li> </ul>

## 8.7 Sheep Value Chain and Analysis

The sheep value chain was selected for several reasons.

- Sheep are the number one traded animal in livestock markets throughout the country and the active and sizeable markets in Mazar and Kunduz are no exception. (See PEACE/ALTAI reports on livestock markets).
- Lamb is the most expensive meat per kilo compared with beef or chicken.
- Although lamb/mutton is the favourite meat in Afghanistan, sheep were also chosen because of the significant bi-products of wool, karakul (in Mazar), skins/leather and sometimes milk.
- There was very high mortality during the 2008 drought and flocks are only now recovering. This has pushed up the price of lambs.
- Sheep are also bankable assets for farmers.

**Figure 12: Value Chain Financial Flows and Relationships of Sheep**



**Table 18: Sheep Value Chain Overview**

Value Chain Actor/Participant	Key Findings
<p><b>Input Level</b></p> <p>Input supplier / service provider (seed, fertilizers, irrigation, extension)</p>	<ul style="list-style-type: none"> <li>• Veterinary medicine ( de-wormers and vaccines) from Government vets, Veterinary Field Units (VFUs), AgDepots, farm stores, private commercial shops</li> <li>• Seed cake or alfalfa and straw from millers or informal markets</li> <li>• Kuchis are the main suppliers of livestock for fattening, although many farmers breed their own lambs</li> <li>• Large livestock markets in Kunduz and Mazar</li> </ul>
<p><b>Producer Level</b></p> <p>Farmers / Herders</p>	<ul style="list-style-type: none"> <li>• Producers may be sedentary or nomadic (Kuchi)</li> <li>• Average flock size is about 40, but we found numbers ranging from 1 to 400</li> <li>• Lambs were sold in the market at ages from 1 month (before migration to Badakhshan) to more than one year (mutton). We had no indication of optimum weight. Sales were to butchers, traders and individuals; few sales were to slaughter houses – but this may vary seasonally.</li> <li>• In Kunduz, lambing starts early March. Lambing average claimed was 1.5. Lambs are removed from ewes too early and farmers/Kuchis drink the milk.</li> <li>• Flocks graze on rangeland locally in early spring and then move to the high pastures of Badakhshan for the summer, returning to be housed under cover in the winter. But several small farms keep sheep at home all year – these would be for home consumption at Eid or other festival</li> <li>• Shepherding is a significant cost. Where sheep are kept at home, they are tended by women. High feed costs are incurred if sheep are fattened after returning from pastures when alfalfa and other materials may have to be bought in to mix 50:50 with straw.</li> <li>• Sheep are a bank for farmers. Farmers sell sheep to buy inputs for other crops.</li> <li>• Farmer quoted Lamb Prices: 2008: 2,000 AFN; 2009: 9,000 AFN, but Altai/Peace report gives market prices for lambs in February/March as around 3,000 – 3,500 AFN</li> <li>• Breeds traded in the Mazar and Kunduz markets are similar to the rest of Afghanistan except for the specialization into Qaraqul / Karakul in Mazar</li> <li>• Sheep are sheared once per year, but the quality of wool in Kunduz and Mazar is low and often used by farmers' families to make kilims.</li> </ul>
<p><b>Processor/Trader Level</b></p> <p>Home and Village Processors /</p>	<p>Wool and carpets</p> <ul style="list-style-type: none"> <li>• Own wool used to make kilims</li> <li>• Wool for carpet weaving, a cottage industry especially among Turkmen, is bought in as 'Belgian'. Ghazni Province is also famous for high grade carpet wool.</li> </ul>

<p>Large processors</p>	<ul style="list-style-type: none"> <li>• Carpet makers are significant borrowers from MFIs to buy wool and dyes.</li> <li>• 6m<sup>2</sup> carpet from Qala-e-Zal (Kunduz) sells for \$400 - \$600 wholesale.</li> <li>• Material costs are \$100.</li> <li>• 2 people for 3 months to weave one 6m<sup>2</sup> carpet.</li> <li>• Some use own wool. Some imported from Belgium. Dyed locally with plant dyes.</li> <li>• Wool costs \$5/kg</li> <li>• Carpet washing facility in Kunduz. \$50 per carpet.</li> </ul>
<p><b>Processor/Trader Level</b></p>	<p>Hides and skin</p> <ul style="list-style-type: none"> <li>• Plan for a \$1.5m tannery in Kunduz, but cost of environmental compliance for waste water disposal is high. Private investor has capital (\$600k) for tanning, but grant or loan required for water treatment. A local tannery and the planned 5 slaughter houses in the north (ADB) would be significant interventions that would add value and likely increase demand for local sheep production.</li> <li>• No information was collected on Karakul.</li> </ul>
<p><b>Processor/Trader Level</b></p> <p>Local Traders / Primary and Secondary Traders</p>	<ul style="list-style-type: none"> <li>• A large number of traders were present in Mazar and Kunduz markets</li> <li>• Badakhshan and Takhar livestock are traded in Kunduz market and then to Kabul or Kandahar.</li> <li>• Jawzjan, Faryab, Saripul and Samangan livestock are traded in Mazar market and thence to Kabul.</li> <li>• Slaughter houses play an insignificant role in trade. Most animals are slaughtered by retail butchers at their shop or purchased live for slaughter at home</li> </ul>
<p><b>Output Level</b></p> <p>Domestic Consumers</p>	<ul style="list-style-type: none"> <li>• Many people fatten own sheep for domestic consumption</li> <li>• Butchers buy direct in the market or from traders to supply urban consumers and kebab restaurants</li> </ul>

**Table 19: Key Constraints, Possible Interventions and Financing Components of the Sheep Value Chain**

<b>Constraints and Barriers</b>	<b>Possible Interventions</b>	<b>Financing Components</b>
1. Poor quality wool	<ul style="list-style-type: none"> <li>• Re-stocking with breeds with higher quality wool, and the appropriate color</li> </ul>	<ul style="list-style-type: none"> <li>• Financing for the re-stocking</li> </ul>
2. Lack of training in maximizing output and quality of hides.	<ul style="list-style-type: none"> <li>• Training in skinning and tanning</li> </ul>	
3. Weight gain not optimized	<ul style="list-style-type: none"> <li>• Training in feeding</li> <li>• Cash flow and liquidity so the farmer can plan and feed for maximum sales and profits</li> </ul>	<ul style="list-style-type: none"> <li>• Appropriate loan products for producers for sheep-rearing</li> </ul>
4. Re-stocking herds	<ul style="list-style-type: none"> <li>• MFI product aligned to livestock calendar</li> </ul>	<ul style="list-style-type: none"> <li>• Appropriate loan products for producers for sheep-rearing / herd restocking</li> </ul>
5. Knowledge of prices before reaching market	<ul style="list-style-type: none"> <li>• Tamas or MCI market information system</li> </ul>	

The following section will summarize the findings, identification of barriers, and possible interventions described in each of the above value chains. Clearly, common themes and patterns emerged in the value chain overview of this section that will inform the study's conclusions and recommendations.

## 9.0 ANALYSIS AND RECOMMENDATIONS

### 9.1 Concluding Analysis of the Value Chains

The study highlighted a number of constraints in the inputs, production, processing and marketing sectors for the selected agricultural value chains, always keeping a focus on the implications and opportunities for microfinance institutions and MISFA to increase access to finance in the agricultural sector. The challenges when approaching value chain development and/or financing are complex, and solutions will need to involve integrated approaches involving partnerships or strategic alliances, rather than stand-alone interventions. Given the dual objectives of incorporating poor producers as well as focusing on market preferences, the interventions should be both commercially viable and development-focused. It is also important to recognize the many ongoing agricultural projects, activities and interventions by numerous donor-funded initiatives, and the effects of these on markets, producer behavior, and businesses (both positive and negative).

All of the recommendations provided to MISFA for both microfinance and SME lending follow basic guidelines and principles for agricultural finance:

- Rural and agricultural financing need to be developed and implemented as an evolutionary process. It is important to continually refine what we do, learn from and share our mistakes and successes. Careful market research, planning and step by step piloting and implementation that follow best practices for prudent financing must be followed. Rapid growth in agricultural portfolios is almost always difficult for institutions to manage.
- The solution should focus on building local capacity: independent management, local ownership, and contextualized solutions. Solutions and responses will vary from region to region, and depend on local leadership and ownership of activities. Investing in capacity building is part of this process. This principle is especially important for banks and microfinance institutions interested in serving this new but specialized market segment.
- The approach should foster win-win relationships in the value chain: public-private sector partnerships, new business opportunities and enhanced trade, increasing the flow of products and services, and equitable and profitable participation of all parties.
- The partners should focus on integrated solutions that address both financial and non-financial constraints to the value chain. Wherever possible innovative linkages and partnerships should be encouraged to mitigate risk, finance profitable activities, and share expertise and build capacity across sectors (agricultural and financial).
- Finally, all initiatives should encourage the growth of Afghan farmers as business people, and their engagement in commercial production value chains and sustainable financial services delivery. This might require attention to financial literacy and / or business planning, especially at the SME level.

The primary issue in rural and agricultural finance is that a comprehensive, integrated approach is required for effective financing interventions. Crop-specific value chains are one way of evaluating potential for finance to smallholders, but should probably not be exclusively used to evaluate financing opportunities in an environment where household activities are highly diversified and specialization is uncommon. Microfinance to small-scale producers or very small traders may not be effective or useful if there are also constraints and financing barriers for processors or traders who are vital to the value chain. Financing interventions that focus

exclusively on SMEs, and that do not consider the product needs of end consumers or the constraints facing farmers or producers will also be ineffective, and may in the end prove to be a high credit risk.

While there is value in focus and specialization in financial service delivery, it can also become a weakness if the needs of SMEs and those of the farmers or end consumers are perceived to be mutually exclusive.

This study identified two types of opportunities: 1) general opportunities, which highlight general micro and SME rural and agricultural financing needs that are applicable across the sector and 2) value chain specific financing opportunities, which point to specific financing needs along a high-potential value chain where the value chain relationships could be leveraged to reduce risk or transaction costs for the lender. Naturally in some cases these two areas of financing opportunities will overlap.

## **9.2 Opportunities and Recommendations for MISFA – Microfinance and SME Financing for Agriculture**

A variety of approaches are recommended to guide MISFA's role in the process of increasing access to rural finance. A range of financial service providers will also be needed – be they banks, SME lenders or microfinance institutions, because of the range of financial services required throughout the value chains.

The following sections describe agricultural and value chain finance opportunities, implications arising from the study, and recommended courses of action for MISFA. It should be understood that references to agriculture include livestock activities as well.

### ***9.2.1 Build MISFA Internal Capacity for Agricultural and Value Chain Finance***

#### **Opportunities:**

- The issue of Sharia-compliant lending cannot be ignored and will not go away. The vast majority of Afghans are very sensitive to the issue, particularly in southern regions of the country. MISFA is encouraged to address the topic with its partners in 2009 in order to contextualize financial service delivery for the Afghan market and perceptions of Sharia-compliant lending.
- The paradigm, technical skills and application of agriculture and value chain finance development is different from typical, traditional microfinance. A broader perspective and different skill set is needed.
- Rural and agricultural finance and value chain finance in particular are relatively untested and not widely familiar in the microfinance sector, although the context and economic strategy of Afghanistan indicates this is a priority area, and the study found that the level of activity and potential is significant.

#### **Recommendations:**

MISFA should build its internal knowledge, awareness, personnel skills development and capacity in rural and agricultural finance for both microfinance and Small and Medium Enterprise contextualized and appropriate service delivery. This includes a strong knowledge and capacity in value chain finance. In the Consultant's view, the divisions between the microfinance and SME departments need to be softened somewhat in order to foster greater

synergies and collaboration for strong agricultural finance, especially as it relates to value chains, which by their nature encompass businesses of different sizes.

### ***9.2.2 Capitalize on MISFA as Coordinator and Knowledge Centre for Agricultural Value Chain Finance***

#### **Opportunities:**

- The significant number of donations and subsidies in the agricultural sector puts the commercial assumptions and private sector initiatives at risk of distortion and dysfunction. Most projects are very short term in nature, with the medium and long-term effects still unrealized and unknown. Too many subsidies may also distort and corrupt the credit culture in both microfinance and SME lending initiatives to the agri-sector. This may be one of the risks of entering the agricultural and rural sector too rapidly or without careful management of expectations and perceptions.
- There is value in being aware of donor and project support to the sector, and linking with appropriate financing opportunities. However, there is also tremendous value for the commercial financial sector (including best practices microfinance) to remain at arms-length of projects and donors to avoid the perception of linkages with other, donated services.
- Most of the above projects interviewed in this study are looking for financial service linkages to banks and microfinance institutions. MISFA can play an effective coordinating role, facilitating and linking the small to medium scale producers and processors and with MISFA partner institutions.
- There is great potential in developing strategic alliances with other agricultural support activities in order for SME and microfinance lenders to provide the financial services to farmers, input suppliers and traders. These alliances do not alleviate the MFI or bank's responsibility to conduct necessary due diligence, but they offer another avenue of risk management. In some cases, donors or projects may decide to set up a Guarantee Fund for agricultural portfolio, although caution is advised in order to reduce moral hazard.

#### **Recommendations:**

In the interview process, what was clear to the Consultants was the volume of work going on in agriculture, as well as the lack of coordination in the sector between the actors. Several donors and project implementing agencies commented on the valuable role that MISFA could play to bring the various actors together to plan and build strong solutions and partnerships to address financial challenges in priority value chains.

MISFA should position itself as a key partnership broker for dialogue, coordination, priority – setting, and strategy development for rural and agricultural finance and value chain finance linkages in Afghanistan. The current value chain development and agricultural interventions in Afghanistan are all constrained by the liquidity and long term investment gaps in the chains. This should be a powerful incentive to bring people to the table, to discuss options openly, and to build fruitful linkages and partnerships with MISFA's MFI and bank partners. Financial institutions and non-financial NGOs/businesses need help to 'speak each other's language' as they often do not understand the motivations and risks of the other party. In the Consultant's experience, successful value chain finance interventions more often depend on the strength of the partnership than on the technical capacity of the institutions. MISFA could play a critical role in building successful linkages that benefit the financial institutions, the agricultural sector / value chains, and most importantly the businesses and farmers that operate within the chains.

MISFA should consider appointing a Business Development / Linkages Coordinator familiar with the operations and development needs of microfinance service providers, banks and their SME lending departments, and of the agricultural sector and its government and project activities. This individual would be assigned responsibility for facilitating linkages, partnerships and contacts between processors, producers, producer associations, projects, banks and microfinance service providers

### ***9.2.3 Build MISFA MFI Partners' Capacity for Agriculture and Value Chain MicroFinance***

#### **Opportunities:**

- There is a strong need for MFIs to develop appropriate loan products – tenure, service fees, and repayment frequencies that make sense for the farm business. Without it, the farm will be unable to cover the loan expectations. The vast majority of MFIs and SME lenders do not have suitable products or approaches for agricultural credit operations.
- There are a number of financing gaps identified for farmers and SME businesses in a range of activities.
- Lending to farmers as producers in the value chain in isolation from understanding the entire chain may in fact increase credit risks to the institution.
- Strategic expansion into the agricultural sector should be led by the MFI – its Board, institutional and management capacity – and not driven first and foremost by donor or sector expectations and agenda. The MFI must be prepared and committed to undertake this direction.
- Farming and agriculture is an inherently risky venture because of the exposure and impact of the elements and nature: weather, disease, and insects. Microfinance also has inherent risks. Addressing micro-agricultural lending then becomes extremely risky – with the result that many banks and financial service providers address the risk by avoidance.

#### **Recommendations:**

MISFA should provide support and capacity building (directly or indirectly) to partner MFIs on product development for agricultural finance in several distinct ways:

- Technical advisory services to MFIs in systematic planning, testing and implementation of appropriate generalized agricultural microfinance products to farmers and producers. These financial products should be ready for launching by the next growing season which begins in February 2010.
- Technical advisory services to MFIs in appropriate agribusiness support loans to input supply shops, veterinarian shops, fertilizer shops, horticultural service providers, and other service providers to the agricultural sector.

The value of the two approaches above is that farmers and small agricultural input suppliers that operate or serve a number of value chains are supported. While these products would not necessarily be crop-specific, the MFI should be made aware of the most prominent local value chains in order to properly manage the risks of lending to farmers and of the farm economy in general.

MISFA should offer technical support to MFIs to develop new loan products appropriate for groups of rural producers. These loans would be suitable for existing Village-led Savings and Loans groups (formed in projects), Common Interest Groups, grower groups, and grower

associations. Lending to groups already formed for productive purposes minimize the risks and the administrative costs for the MFI, and it may also be an appropriate way to reach more women farmers.

MISFA could also consider developing a Working Group on Agriculture Finance for MISFA partners who are active in this sector, to share experiences and discuss sector-wide issues and potential solutions (e.g. enabling environment issues, agricultural data capture and dissemination, agricultural lending methodologies, etc.).

#### ***9.2.4 Build Capacity of SME Lenders in Agriculture and Value Chain Finance***

##### **Opportunities:**

- Expansion into rural and agricultural sector by MFIs must be done with the right products and strong institutional capacity and understanding of the agricultural sector, particular agri-processing. Lending to the SME agri-sector requires a basic understanding of the business' entire chain of inputs (farmers, producers) and outputs (export and domestic consumers) in order to evaluate feasibility and manage credit risks.
- The operative word in this brief overview of SME financing for Agribusiness is "opportunity." There are significant financing gaps at this level, and if effectively addressed, could stimulate the supply and production of crops and address financial constraints of farmers as well.
- Farm and agricultural service providers – farm stores, AgDepots, seed supply companies, horticultural and veterinarian services -- also require appropriate financing and represent a strong player in all produce value chains. They are often one of the most effective ways to lend to farmers – one of the value chain finance alternatives. Both microfinance and SME financing are appropriate, depending on the size and scale of the business.
- There is significant opportunity for lending to the SME agri-sector, particularly for processors, storage facilities, and export or grower associations. Products need to be appropriately designed and marketed well. Financial service providers are able to use machinery and equipment title documents in leasing arrangements, another effective way to manage agricultural credit risks.
- Managing the financial and credit risk of lending to poor farmers should go beyond the traditional means that microfinance has managed risk (e.g. frequent repayments, short-term loans, working capital loans, group guarantees). Successful agri-financing in developed economies has usually taken an integrated approach. Large buyers, fertilizer agents and input suppliers have often engaged in financing directly (value chain financing). In other situations, financiers have entered into tri-party agreements with the value chain actors and the producer, agreeing to deduct loan payments from the sale of produce to the buyer, for example.

##### **Recommendations:**

- MISFA should provide support and capacity building to its SME banks and partners to offer appropriate financial services to agribusinesses, agri-processing, and larger farmers, including commercial farming activities. Part of this support would focus on appropriate institutional-level risk management approaches to agricultural portfolios.
- MISFA should provide or coordinate linkages with other providers who offer training / support to SMEs on business planning, bookkeeping, and basic business management,

since these are the missing links that often prevent businesses from qualifying for financing.

- Where institutions continue to be risk-averse to engage in agriculture activities, or where costs are prohibitive, MISFA should consider incentives, credit enhancements, or risk-sharing arrangements that would make the sector more attractive to SME lenders. These types of support mechanisms must be properly managed to reduce moral hazard, but if designed correctly can be effective in increasing financial flows to targeted SMEs / value chains. Shared risk across the value chain is one way of approaching guarantees and incentives for SME finance in agriculture.

Again, this support and product offering should not be limited to one value chain, but to agribusiness and support businesses in general, evaluating them in the context of the value chain in which they operate. Where relevant, SME lending activities may be coordinated with microfinance activities to support specific value chains at both levels, ensuring development along all steps in the chain.

### ***9.2.5 Support MFI and SME Partners in Managing Change and Technology for Innovations in Service Delivery***

#### **Opportunities:**

- The improvements in infrastructure, particularly in telecommunications networks and systems represent future opportunities to reduce operating costs for rural financial service delivery. The recent private investment in the agri-processing sector is also an opportunity to expand in rural and agricultural loan portfolios – for both processors and producers.
- In order to provide affordable credit to farmers in rural and remote areas, MFIs must look at how to reduce operating costs; this will likely include the use of technology in service delivery and back office operations in a greater way.
- The Afghan microfinance sector still needs strong technical support in management, governance, credit delivery, MIS systems, internal audits and controls. Capacity building at all staff levels is also a priority in order to keep institutions on a solid footing for good credit management. This support is particularly needed when an institution is undergoing a significant change – for example, expansion into a rural market, a new loan product (e.g. agriculture) or adapting a new MIS or the use of technology in program operations.

#### **Recommendations:**

- MISFA should provide support and capacity building to MFIs and SME partners in planning, preparing and changing client service delivery or back room operations through technology to reach rural clients. Serving remote clients the same way as urban clients is usually prohibitively expensive. MFIs and SME lenders have a unique opportunity to optimize their systems to be able to interface with the m-Paisa network (in some areas), improve MIS, adapt other technologies (hand-held devices, etc) and potentially reduce transaction costs. MISFA could play a coordinating role as it has done in the past.
- MISFA can help lead MFIs through the 'change-management' process as they move to a greater focus on rural clients: MFI staff may already provide some business advice to clients. However, successful agricultural lending requires staff with specialized knowledge of farming and agribusiness. The move to serve agricultural clients might also mean a shift in the underlying staffing approach or mission of the organization. In

some cases, agricultural loan officers will need to be oriented to their expanded role of 'Business Development Officers' rather than loan collectors. This presents a change at the branch and senior management levels as well, since supervisors must also have the skills required to oversee and monitor agricultural lending activities.

### 9.3 Opportunities for MISFA – Value Chain-Specific Financing

The value chain assessments highlighted many areas where financing gaps are preventing the value chains from operating at higher or more profitable capacities. Before deciding on final selection of value chains or regions of focus for agriculture finance interventions, it may be helpful for MISFA to assist its MFI partners to think about the critical issues in the value chain in order to get a broader perspective of financing issues generally in agriculture and agribusiness, for example by asking:

- What and who “drives” the farmer in production – is it the processor, the exporter or the trader? Or the end consumer? Do value chain players and farmers in particular, make choices based on good market and demand information?
- Identify the bottlenecks in the production to market processes: Are the bottlenecks technical? Logistical? Or financial? Where are the liquidity problems – with the producer, the trader or the processor? Where are the capacity issues? Are there supply issues related to seed, fertilizer or irrigation?
- Value chains tend to be crop-specific, but one can also look at the actors or service providers in the value chains that serve a broad range of products. For example, a grader, packer and storehouse may be specialized in one crop, but it can often handle a range of crops. Farm stores usually serve livestock, horticulture and cereal crop production activities. Where are the opportunities to finance businesses that will benefit a range of value chains?
- Where are the best opportunities for strong partnerships or strategic linkages for value chain financing? Some examples that were uncovered during the research included BRAC and FAO, AFS and Mercy Corps, and MEDA's TTGG and WWI – but there are others that will need to be identified depending on location and value chain.

In all cases, the issues in the value chain will be multiple and dynamic in the Afghan context. Responses will also need to be dynamic and well-coordinated.

The following table highlights the key financing potential in each of the seven value chains analyzed. An overall priority ranking was assigned to each value chain (left hand column) based on three factors (second column): net additional income potential, particularly to the small farmer, potential value-added (in Afghanistan) in processing, by-products, and employment, and lastly export potential, since export earnings will likely be based on high-value cash crops and generate foreign exchange earnings. Liquidity and financing needs of the value chains were not considered exclusively, since by and large, farmers around the world are often cash-poor. Liquidity demand must be weighed with the earning potential it may bring if it is met.

Any MISFA partners discussed in section 7 who are prepared to adapt loan products for these credit needs would be suitable partners. The possible partners listed below were included because their current product offering is suitable for the business financing opportunities listed in the following table.

**Table 20: Ranking of Value Chains and Financing Opportunities**

<b>Value Chain and Priority</b>	<b>Net Income/ Value-added/ Export Potential</b>	<b>Financing Opportunities</b>	<b>Possible Partners</b>
<b>Almond (High)</b>	High/Medium/High	<ul style="list-style-type: none"> <li>• Farmers need long-term financing to replant orchards. This is a challenging intervention for most microfinance and SME financing terms</li> <li>• SME financing for warehouses, packaging and pack house facilities</li> <li>• SME investment and financing for almond processing</li> <li>• MFIs and banks need to adapt loan product terms for long term farm investments</li> <li>• SME and MFI lending to agribusiness traders for short term working capital</li> </ul>	FMFB, CFA
<b>Melon (Low - Medium)</b>	High/Low/Medium	<ul style="list-style-type: none"> <li>• SME financing of agribusiness sector, agri-support sector, e.g. transport, cold storage, etc.</li> <li>• MFIs and SME lending could target associations through specific loan products, assuming all other due diligence is in place</li> <li>• MFI and SME lending to traders and agri-wholesalers for working capital</li> </ul>	All identified
<b>Wheat (Low)</b>	Low/High/Low	<ul style="list-style-type: none"> <li>• Financing for farmers to invest in low-cost technologies to improve yields / reduce costs (e.g. micro-irrigation, modern implements)</li> <li>• Finance agri-processors to finance their producers, including contract farming</li> <li>• MFIs finance farmers directly, based on sales contracts with the agro-processors</li> <li>• Additional financing and loans to agri-processors for working capital.</li> </ul>	All identified
<b>Rice (Medium – High)</b>	High/High/Low	<ul style="list-style-type: none"> <li>• Financing associations through MFIs or SME bankers – this would be a revised type of loan product for the institution. Associations could build storage capacity for members.</li> <li>• Financing agri-processors to undertake value chain financing (offer working capital finance to their affiliated</li> </ul>	FMFB, CFA, banks

Value Chain and Priority	Net Income/ Value-added/ Export Potential	Financing Opportunities	Possible Partners
		producers) <ul style="list-style-type: none"> <li>• Financing producers, based on firm sales contracts with the processor</li> <li>• Financing to agri-traders</li> <li>• Warehouse receipts: Banks and MFIs recognize stored commodity as an asset, and lend to farmers against that asset</li> </ul>	
<b>Sesame (Medium – High)</b>	High/High/Low	<ul style="list-style-type: none"> <li>• SME lending to processing and packaging industry in the country</li> <li>• SME financing to storage, warehouse and inventory facilities</li> <li>• SME financing to agri-traders</li> <li>• Appropriately designed loan products from MFIs for farmer working capital (especially for planting and harvest expenses)</li> </ul>	FMFB, CFA, ARIES
<b>Dairy (Low - Medium)</b>	Low/Medium/Low	<ul style="list-style-type: none"> <li>• Appropriate MFI loan products for dairy activities</li> <li>• Value chain financing by linking a financial service provider to the processor and arranging for loan collection from the sale of product</li> <li>• SME financing of dairies, milk processing equipment, and packaging</li> <li>• SME financing of dairies, milk processing equipment, and packaging</li> </ul>	BRAC, CFA, FINCA
<b>Sheep (Medium - High)</b>	Medium/High/High	<ul style="list-style-type: none"> <li>• Appropriate loan products for producers for sheep-rearing</li> </ul>	FMFB, CFA, BRAC, FINCA

### 9.3.1 Lead the Piloting of a Crop-specific Value Chain Finance Linkage

Based on Table 20 above, MISFA should consider developing and piloting a significant value chain finance linkage for one or two of the highest-priority value chains evaluated in Balkh and Kunduz. The table highlights many gaps in the various value chains, but some examples that had the most potential included:

- Almond value chain: Long-term financing for farmers to replant orchards; SME financing for construction of warehouse and packing facilities; SME investment and financing for processing facilities.
- Rice value chain: Financing producer associations for construction of storage facilities for rice to avoid seasonal losses or fire sales; financing to agri-processors so that they can finance working capital of their affiliated producers; investigate potential for a warehouse receipts system.
- Sesame value chain: financing for SME processors / packaging firms; SME financing for warehouse facilities; working capital finance for small producers.
- Sheep value chain: appropriate financing loan products for sheep rearing for small producers.
- Wheat value chain: working with the flour mill in Mazar to develop contract farming that includes a financing component with 10,000 farmers.

Additional research and background work would be necessary to select the most appropriate processing or lead businesses, the most suitable value chain, and if needed, the most appropriate financial services provider – whether an SME window of a commercial bank, or a microfinance institution serving farmers or traders. Any number of tools or models to conduct the research would be appropriate (e.g. SWOT, PESTEL as suggested by MISFA staff or other tool). However, the research should be grounded in solid and practical market analysis, market demand and supply, and market preferences and trends.

## 9.4 Next Steps towards Implementation

MISFA might consider the next steps in moving forward with the information learned on this research study.

**Table 21: Next Steps**

Activity	Timing
a. Evaluate MISFA's own strategy, niche, and role in the agribusiness financing interventions.	Near term (Q3 2009)
b. Gather sector players (MFIs, banks, projects, key businesses) together at the table – in workshops, roundtable meetings, etc.—to discuss needs and opportunities, and to determine best options for focus, partnerships and coordinated interventions for rural and agribusiness financing.  This could be done by value chain /sub-sector or by province for example (to keep discussions focused and relevant.)	Near term (Q3 2009)
c. Make strategic decisions on moving ahead with specific	Near term (Q3-4 2009)

Activity	Timing
tests and activities (by region, value chain, products, etc.)	
d. Construct implementation plan including support needs for partners and MISFA's key contributions.	Medium term (Q4 2009)
e. Support the partners as required with the tools, products, approaches, or oversight as lead up to new product launches and linkages development.	Medium term (Q4 2009-Q1 2010)
f. Pilot the products / linkage activities, document lessons, adapt systems and approaches	Medium term (Q1-2 2010)
g. Prepare to roll out the agricultural financial solutions across additional partners, value chains, or regions.	Medium/long term (Q2-3 2010)

In conclusion, the timing seems ideal for MISFA to take the lead on supporting the expansion of access to rural finance in Afghanistan. While the sector can seem overwhelming (the level of data collected in this short study is proof enough of that), by being strategic about the support to partners as well as identifying its niche in the sector, MISFA will be able to leverage its own resources and that of external partners for maximum benefits to the agricultural and financial sectors as well as to their ultimate clients – the people of Afghanistan.

## **APPENDIX 1 - TERMS OF REFERENCE**

### **Agricultural Market Research for Microfinance and SME Interventions** Microfinance Investment & Support Facility for Afghanistan (MISFA)

#### **Location:**

Afghanistan – 2 regions in Northern Afghanistan: Kunduz and Balkh,.  
As a back up, if one of the other regions is not accessible – Parwan.

#### **Job Description:**

##### About the Organization:

MISFA (Microfinance Investment & Support Facility for Afghanistan) Ltd. is the apex microfinance promoting agency in Afghanistan. MISFA was set up in 2003 with a mission to provide financial services to rural and urban households through retail microfinance service providers. As of June 2008, the total outstanding portfolio of the 15 MISFA partners is about \$113 million, reaching nearly 450,000 households; 40 percent of whom are in rural areas. A significant portion, nearly 2/3rd of the active clientele, consists of women.

##### Background:

The microfinance sector in Afghanistan has grown quite rapidly in the last few years since its inception in 2003, with increasing client and outreach and expanding portfolio size. Impressive though the figures are, there is a growing recognition that there is a need for a more targeted product and outreach strategy for reaching the vast numbers of poor and very poor Afghans living in rural areas. There is a particular need for the design and implementation of financial services that develop and support the agriculture/livestock value chains.

#### **Tasks/Responsibilities:**

Task I: Value chain assessments with financial lens - Value chain assessments of 2-4 agricultural value chains – (at all levels from production, wholesaling, marketing/sales etc.) with particular emphasis on the need for credit and other financial products in order to promote upgrading of the chains or increased participation and profitability of small producers / enterprises. The primary actor of interest is small and medium scale producers and enterprises in the agricultural value chain. The final value chains will be selected following further desk and key information research, but will likely be in the areas of traditional livestock (cattle and/or sheep), staples (potato), and horticulture.

Task II: Financial sector market assessment – Survey and analysis of existing MFI and Bank products, infrastructure, interests, and capacities to serve the targeted value chain actors and service providers (especially small producers and enterprises) with appropriate financial services to improve production capacity or promote value chain strengthening. The analysis will consider the specific challenges and needs of the value chains identified in Task I of the project;

Task III: Recommendations for financial services interventions – Based on the findings of Tasks I & II the consultant will present its recommendations for MISFA on the potential financial solutions that would assist to overcome critical financing / production constraints in the targeted value chains. The recommendations report will include, for each value chain:

1. Value chain assessment which includes overview of the value chain, actors, value chain map, financial flows, and key strengths and challenges
2. Recommended financial institution or value chain actor partners for delivery of financial services,
3. Critical financial products or services needs for each value chain,
4. Suggestions for financial services delivery options / procedures
5. Analysis of risks in the value chain (from perspective of borrower and lender)
6. Discussion of context-specific design factors (regional, religious and other differences in the affected rural populations e.g. weather conditions, predominant agricultural activities, need for Sharia-compliant lending practices, etc.)
7. Draft guidelines for design of Action Research projects for value chain financing product piloting involving MISFA's partners during 2009.

The findings will be presented to the MISFA team in a workshop setting that shares both the methodology and the findings to increase capacity of the client staff in agriculture market research for microfinance. MFI partners may also eventually participate in the debriefing workshop if MISFA chooses.

### **Consulting Team:**

- MEDA Senior international agriculture finance / microfinance specialist (1)
- MEDA Senior international agribusiness / agricultural development specialist (1)
- MEDA Senior international agricultural / value chain finance specialist (1) – as backstopping
- Local agriculture support staff from provinces where study will take place (1-2 depending on language capacity, number of areas, etc.) [MISFA to help identify proper specialists from partners working in those areas]

### **Client Support:**

- MISFA staff: at least one MISFA staff person will participate in the market research in order that they can learn from the MEDA methodology for agriculture value chain financial research. A second SME specialist may also participate.
- MISFA director: will support with guidance, direction, and logistics where necessary.
- MISFA will arrange local logistical personnel for the team including driver, interpreter, etc. as required.

## APPENDIX 2 - LIST OF ORGANIZATIONS VISITED

Final Work Plan – MISFA-MEDA Rural, Agriculture and VCF Market Research

DATE	LOCATION	ACTIVITIES and MEETINGS	KEY CONTACTS	PARTICIPANTS
Sun May 24	Travel to Kabul	<p>Arrive in Kabul</p> <p>11 AM Meet with MISFA / Briefing / Schedule &amp; Logistics Review</p> <p>2 PM – Asia Development Bank (ADB)</p>	<p>Madhavan Ati, Technical Advisor Email: <a href="mailto:Madhavan.ati@misfa.org.af">Madhavan.ati@misfa.org.af</a> Cell: (93) 776 121 193</p> <p>Allan Kelly, Deputy Country Director/ Principal Economist AFRM Asian Development Bank Email: <a href="mailto:atkelly@adb.org">atkelly@adb.org</a> <a href="http://www.adb.org">www.adb.org</a> Email: <a href="mailto:atkelly@adb.org">atkelly@adb.org</a> Cell: (93) 797 955 930</p>	<p>Brad, Ruth, Madhavan Brad, Ruth</p>
Mon May 25	Kabul	<p>9 AM – Afghanistan Rural and Enterprise Initiatives Support</p> <p>2 PM – Food and Agriculture Organization of the United Nations (FAO)</p> <p>4 PM – Ministry of Rural Rehabilitation and Development (MRRD)</p>	<p>Don Henry, Senior Program Director Email: <a href="mailto:Henrymachg@Aol.com">Henrymachg@Aol.com</a> Cell: (93) 796 456 381</p> <p>Stephanie Charitonenko, Chief of Party, Academy for Educational Development</p> <p>Street 1, House 109 Charahi Ansari, Shahr-e-naw Kabul Afghanistan Cell: 0797 128 807</p> <p>Mohammad Aqa, Assistant Representative Email: <a href="mailto:mohammad.aqa@fao.org">mohammad.aqa@fao.org</a> Cell: (93) 799 668 336</p> <p>Ahmad Javaid Zeerak, Head of Program Email: <a href="mailto:javid.zeerak@mrrd.gov.af">javid.zeerak@mrrd.gov.af</a></p>	<p>Ruth, Madhavan (Brad with the ARIES meeting)</p>

			<p>Cell : (93) 773 624 214          Mohammad Haroon Chakhansuri          (Manager, Research Services)          Email:  <a href="mailto:haroon.chakhansuri@mrrd.gov.af">haroon.chakhansuri@mrrd.gov.af</a>          Cell : (93) 777 313 250</p>	
Tue May 26	Kabul	<p>9.30 AM – BRAC</p> <p>11.00 AM – Horticulture and Livestock Project (HLP) in the Ministry of Agriculture, Irrigation and Livestock (MAIL) funded by World Bank</p> <p>2 PM – FINCA</p> <p>4.00 PM – Ministry of Agriculture, Irrigation and Livestock (MAIL)</p>	<p>Md. Fazlul Hoque, Country Head          Email: fazlul.h@brac.net          Cell: (93) 700 288 300</p> <p>Noor Akbari          Email: <a href="mailto:naa.akbery@yahoo.com">naa.akbery@yahoo.com</a></p> <p>Ambros Dotzer, Farmer Organization Development Specialist          Email: <a href="mailto:ambros.dotzer@gtz.de">ambros.dotzer@gtz.de</a>          Cell: (93) 795 727 733</p> <p>Stuart Pettigrew, Horticulture Specialist          Email : <a href="mailto:stuart.pettigrew@gtz.de">stuart.pettigrew@gtz.de</a>          Cell: (93) 797 623 513</p> <p>Dala Ram Pradhan, Livestock Specialist          Email: <a href="mailto:dalarampradhan@yahoo.com">dalarampradhan@yahoo.com</a>          Cell: (93) 797 469 706</p> <p>Sayed Khalid "Hashimi", FOD Coordinator          Email: <a href="mailto:sayed.khalid1@hotmail.com">sayed.khalid1@hotmail.com</a>          Cell: (93) 700 629 178</p> <p>Tariq Khan Baluch, CEO / Country Director          Email: <a href="mailto:TBaluch@villagebanking.org">TBaluch@villagebanking.org</a>          Cell: (93) 794 676 582</p> <p>John D. O'Connell, Program</p>	Ruth, Madhavan

			Development Advisor Email: john.oconnell@mail.gov.af Cell: (93) 796 199 694	
Wed May 27	Kabul	11.30 AM – Aga Khan Rural Microfinance Program (ARMP) and First Microfinance Bank (FMFB) Afghanistan	Javed Iqbal, Head of Microfinance ARMP Email: <a href="mailto:javed.iqbal@armp.akdn-afg.org">javed.iqbal@armp.akdn-afg.org</a> Cell : (93) 799 888 014 Abdul Karim Haidar, Head of Microfinance Email: <a href="mailto:karim.haidar@fmfb.com.af">karim.haidar@fmfb.com.af</a> Cell : (93) 799 335 601	Ruth, Madhavan
Thu May 28	Kabul	9.30 AM – ROSHAN and m-PAISA  2.00 PM – Afghan Rural Finance Company (ARFC) ACDI/VOCA  4 PM – PEACE (Pastoral Engagement, Adaptation, and Capacity Enhancement Project)	Zahir Khoja, Director of Mobile Commerce and Product Marketing Email: <a href="mailto:zahir.khoja@roshan.af">zahir.khoja@roshan.af</a> Cell: (93) 799 994 203 Quinton Collier, President & Chief Operating Officer Email: <a href="mailto:quintonacollier@yahoo.com">quintonacollier@yahoo.com</a> Cell: (93) 779 212 204 Dr. Michael J. Jacobs, Chief of Party Email: <a href="mailto:mjacobs@cnrit.tamu.edu">mjacobs@cnrit.tamu.edu</a> Cell: (93) 798 201 763	Ruth, Madhavan
Fri May 29	Off	Day Off		
Sat May 30	Mazar	Travel to Mazar (8 am)  2:00 PM – BRAC Regional Office meeting; prepare schedule, visit clients	BRAC Clients: Ice-cream factory, fruit vendor, oil seed press, local veterinary and pesticide shop, juice shop	Rupert, Ruth, Madhavan, Bashir
Sun May 31	Mazar	AM: Deldai BRAC Branch Visit: 1 Lead Farmer Interview 1 Men’s Focus Group Discussion (@ 15	BRAC Branch Manager	Rupert, Ruth, Madhavan, Bashir

		<p>Farmers)</p> <p>1 Women's Focus Group Discussion (8 women)</p> <p>1 Chicken Farmer Interview</p> <p>1 Bee keeper / Honey Producer</p> <p>1 Shepherd (no interview)</p> <p>BRAC Nursery visit</p> <p>Lunch at BRAC office</p> <p>PM: BRAC Branch Visit</p> <p>1 Men's Focus Group Discussion (@ 18 Farmers) 3 individual farmer visits</p> <p>1 Women's Focus Group Discussion (10 women)</p> <p>3 individual women farmer visits</p> <p>3 individual men farmer visits</p>		
Mon Jun 1	Mazar	<p>8:00 AM Horticulture &amp; Livestock Project (HLP)</p> <p>9:00 AM First Microfinance Bank (FMFB) Afghanistan</p> <p>10:00 AM Balkh City Branch</p> <p>1 Farmer Interview at the Bank (SME)</p> <p>1 Fertilizer and Cement Shop Interview</p> <p>Market Visit: 2 seed shops, 1 small implement shop</p> <p>1 MF Farmer Visit and Interview</p> <p>Lunch in town restaurant</p> <p>1 Farmer association Group Meeting (@15 farmers) and visit to farmers' fields</p>	<p>Abdul Samad Kamawi, Regional Coordinator/Almond Specialist</p> <p>Email: <a href="mailto:skamawi@yahoo.com">skamawi@yahoo.com</a></p> <p>Cell: (93) 799 219 510</p> <p>Mohammad Dawood "Hassani", Mazar-i-Sharif Branch Manager</p> <p>Email: <a href="mailto:dawood.hassani@fmb.com.af">dawood.hassani@fmb.com.af</a></p> <p>Cell : (93) 799 481 092</p>	Rupert, Ruth, Madhavan, Bashir

Tue Jun 2	Mazar	<p>AM: Visit FAO Mazar Dairy (FAO Advisor only) – ARFC Client</p> <p>Visit Bahar Seeds Company and Husbandry Farm - Flour Mill – ARFC Client</p> <p>WOCCU Branch Visit</p> <p>Lunch at WOCCU Guesthouse</p> <p>Visit Amo Poultry Product Company (Hatchery, Feed processor, grower businesses) – WOCCU and ARFC Client</p> <p>Visit Ag Depot Shop (veterinarian supplies, fertilizer, pesticides)</p>	<p>Dr. Aimal</p> <p>Cell: (93) 778 827 486</p> <p>Hamayun Suratzada, Director</p> <p>Email: <a href="mailto:suratzada@gmail.com">suratzada@gmail.com</a></p> <p>Cell: (93) 797 693 792</p>	Rupert, Ruth, Madhavan, Bashir
Wed Jun 3	Travel/ Kunduz	<p>AM: Travel to Kunduz</p> <p>2 Men’s Farmer FGD in Khulm &amp; (total 50 farmers)</p> <p>1 HLP Nursery in Samangan province (4 farmers)</p> <p>Almond Farmer in Aybak in Samangan (1 farmer)</p>	<p>Abdul Samad Kamawi, HLP Regional Coordinator/Almond Specialist</p> <p>Email: <a href="mailto:skamawi@yahoo.com">skamawi@yahoo.com</a></p> <p>Cell: (93) 799 219 510</p>	Rupert, Ruth, Bashir
Thu Jun 4	Kunduz	<p>8:30 AM CFA Microfinance Institution</p> <p>2 Men’s Farmer FGD at CFA Office (total 9 farmers)</p> <p>1 Oil Seed Press visit and interview</p> <p>1 Fertilizer Dealer visit and interview</p> <p>1 Rice Processing factory visit and interview</p>	<p>Moqim, CFA Branch Manager</p> <p>Khan Mohammad “Frotan”</p> <p>Email: <a href="mailto:sanawahid1980@yahoo.com">sanawahid1980@yahoo.com</a></p> <p>Cell: (93) 799 095 709</p>	Rupert, Ruth, Bashir
Fri Jun 5	Kunduz	<p>Half Day off</p> <p>Half Day review of visit notes</p>		
Sat Jun 6	Kunduz	<p>8:30 AM Afghanistan Rural Microfinance Program (ARMP) and First Microfinance Bank Afghanistan (FMFB), Kunduz</p> <p>1 SME Client Interview</p> <p>1 Mazar Flour Mill agent based in Kunduz</p>		Rupert, Ruth, Bashir

		<p>interview</p> <p>1 SME Loan Officer interview</p> <p>1 SME Equipment and spare parts dealer visit and interview</p> <p>2 Almond Market trader interviews (Almond Market)</p> <p>Lunch</p> <p>2:00 PM ARMP Clients</p> <p>2 Men Farmer FGD (total 5 farmers)</p> <p>1 Senior MF Loan Officer (Ag. Credit) interview</p> <p>1 individual farmer interview</p> <p>1 Tractor and Equipment Dealer and Importer – visit and interview</p>		
Sun Jun 7	Kunduz	<p>8:00 AM -- Kunduz River Basin Project</p> <p>Turkish Milk Factory attempt</p> <p>Pakistani Flour Mill Attempt</p> <p>Lunch</p> <p>2:00 PM German Technical Cooperation (GTZ) Sustainable Economic Development Programme (northern Afghanistan)</p> <p>3:00 PM Mercy Corps – Horticulture Engineer</p> <p>4:00 FAO Dairy, Kunduz</p>	<p>Robert Wilkens, Deputy Team Leader, Irrigation Engineer</p> <p>Email: <a href="mailto:rwilkens@telfor.nl">rwilkens@telfor.nl</a></p> <p>Cell: (93) 799 437 053</p> <p>Juergen Ehrke, Principal Advisor</p> <p>Email : <a href="mailto:juergen.ehrke@gtz.de">juergen.ehrke@gtz.de</a></p> <p>Cell: (93) 798 152 216</p>	Rupert, Ruth, Bashir
Mon Jun 8	Travel to Kabul	<p>8:00 AM: Travel back to Kabul via Mazar (Arrive 12.00)</p> <p>PM: Organizing the debrief, writing notes, preparing the report</p>		Rupert, Ruth, Bashir
Tue Jun 9	Kabul	<p>11:00 AM Afghanistan Farm Service Alliance (CNFA Afghanistan)</p>	<p>Rick Pierce, Chief of Party</p> <p>Email: <a href="mailto:rpierce@cnfaafghanistan.org">rpierce@cnfaafghanistan.org</a></p> <p>Cell: (93) 796 343 966</p> <p>Khabir Kakar, Project Administrator</p> <p>Email: <a href="mailto:kakar@cnfaafghanistan.org">kakar@cnfaafghanistan.org</a></p> <p>Cell: (93) 700 077 586</p>	Rupert, Ruth, Madhavan

		2:00 PM Roots of Peace	Dr. J. D. Zach Lea, Country Director Email: <a href="mailto:zach@rootsofpeace.org">zach@rootsofpeace.org</a> Cell: (93) 794 677 212	
Wed Jun 10	Kabul	Debrief /MISFA on preliminary results/recommendations of research		Rupert, Ruth, Dale, Madhavan, Jamal, Bashir
Thu Jun 11	Kabul	Report writing 3:00 PM Visit with World Bank Consultant conducting a desk study in Afghanistan on the same topic	Md. Fazlul Kader, General Manager (Operations) for PKSf in Pakistan <a href="http://www.pksf-bd.org">www.pksf-bd.org</a> Email: <a href="mailto:fazlulkader@pdsf-bd.org">fazlulkader@pdsf-bd.org</a>	Rupert, Ruth
June 13 & 15		Report Writing		
Tue Jun 16	Kabul	7:00 AM - Kabul Market visits: wholesalers  9:00 AM - IDEA / NEW North Central Off Marmul Road, Behind Sultan Razia High School Mazar - i - Sharif, Afghanistan Email: <a href="mailto:zeraat@sbcglobal.net">zeraat@sbcglobal.net</a> Skype: zeraat VOIP (316) 768 4817  10:30 AM – Accelerating Sustainable Agriculture Program (ASAP), Ministry of Agriculture, Irrigation and Livestock  11:30 AM - Kabul Dried Fruit and Nut Market  5:00 PM – Afghanistan Small & Medium Enterprise Development (ASMED),	Tom Brown, Regional Director Email: <a href="mailto:zeraat@sbcglobal.net">zeraat@sbcglobal.net</a> Cell: (93) 797 067 093  Joseph Daniel Mooney (Dan), Chief of Party Phone: 93 (0) 797-272-476 Email: <a href="mailto:jdmoney@asap-af.com">jdmoney@asap-af.com</a> Skype: Joseph.daniel.mooney  Joseph Dominick, DAI Consultant Cell: (93) 797 688 211 Email: <a href="mailto:joseph-dominick@dai-com">joseph-dominick@dai-com</a>	Rupert, Ruth, Bashir

### APPENDIX 3 - COMMONLY USED TERMS IN RURAL AND AGRICULTURAL FINANCE

Term	Definition
<b>Financial services for the rural poor</b>	Financial services for all purposes and from diverse sources tailored to the needs of poor people in rural areas
<b>Rural finance</b>	Financial services used in rural areas by people of all income levels
<b>Agricultural finance</b>	Financing for agriculture-related activities, from production to market
<b>Microfinance</b>	Financial services for lower-income households and micro and small enterprises; Includes all financial services (credit, savings, money transfers, etc.)
<b>Microcredit</b>	Small loans made to lower-income households and micro/small enterprises
<b>Value Chain</b>	The chain of activities and actors that transforms a product or service from an idea to a product to reach a distinct consumer market.
<b>Value chain finance</b>	Financial services provided to a value chain actor, whether from a financial institution or another value chain business
<b>Financial Institution</b>	An entity – regulated or not – that <i>specializes</i> in the provision of financial services
<b>Financial Intermediary</b>	A financial institution that <i>collects deposits</i> , and <i>lends</i> these deposits.
<b>Other Terms Used in Financial Sector Analysis</b>	
<b>Formal financial service providers</b>	Banks, insurance companies, building societies, investment managers, and registered microfinance institutions
<b>Semi-formal financial service providers</b>	Savings and Credit Cooperatives (SACCOs), NGO Microfinance institutions, Cooperatives Credit Unions (depending on country)
<b>Informal financial service providers</b>	Unregistered institutions, e.g. Savings Clubs/Chilimbos. Does not include family and friends
<b>Banked</b>	Those persons that use one or more formal financial services.

<b>Un-Banked</b>	Those persons who do not use formal financial services.
<b>Financially Included</b>	Those that use one or more formal financial product
<b>Financially Excluded</b>	Those who do not use either a formal or an informal financial product
<b>Rural Financial Products and Services</b>	
<b>Working capital</b>	Short-term credit (usually up to 12-24 months) used for operational business expenses
<b>Investment capital</b>	Medium to long-term credit (usually greater than 12 months) used for real estate or asset acquisition or investment.
<b>Line of credit</b>	Revolving credit product that business can draw down (borrow), repay, and borrow again on ongoing basis according to business needs.
<b>Trade credit</b>	Short term or seasonal financing extended from one business to another, usually in the form of sales or purchases on credit, with payment after an agreed period.
<b>Insurance</b>	System whereby individuals or companies pay premiums to an insurance company, which reimburses them in the event of a loss.
<b>Leasing</b>	Contract granting use of real estate, equipment, or other fixed assets in return for payment. In some cases the asset ownership transfers to the client at the end of the contract.
<b>Warehouse receipts</b>	Document listing commodities stored in a warehouse. The receipt can be used to transfer ownership of the commodity without physically moving the goods, or in some cases can be used as collateral for a loan.
<b>Contract farming / Outgrower Schemes</b>	Cash advances or inputs are provided to producers, in exchange for guaranteed (formal) purchase agreement.
<b>Remittances</b>	Money earned outside the community (either domestically or internationally) is sent back using money transfer services.

## **APPENDIX 4 - QUESTIONS ASKED OF FARMERS, TRADERS, SUPPLIERS AND PROCESSORS**

### **Questions for farmers:**

Warm up Conversation and introductions: the drought, this year's crop, the purpose of our visit, our background, interests and farming experience:

#### Specific Questions:

- Basic farm information: How long have they been farming? Did they inherit their land? Do they crop share from large land owners?
- Farm size: Irrigated vs. rain-fed; owned and crop shared
- What do they farm: Livestock, long term horticulture (perennials: orchards, nuts, fruits), short term horticulture (annuals: melons, okra, onion, tomato, cucumber, others), cereal crops (wheat, rice, sesame, chickpeas, inter-cropping alfalfa, other); What roles do members of the household play? Men? Women?
- What are the primary cash crops? Where do they get the greatest margins?
- What do they do with livestock? Stock herds, milk for the family, excess for sales to neighbors or dairies? What roles do members of the household play? Women? Men?
- Do they belong to any associations, community organizations, or producer groups? What are roles of "shuras" (religious leaders), CDCs or the "malik" (tribal or clan leader) in their villages?
- What are the markets, availability, and pricing of inputs? (Get details of input and labour prices for different crops)
- What extension services are available to them?
- What are the issues of irrigation and water management?
- What are the traditional ways of saving? Of borrowing?
- What is the role of the tekadars? The trader? For advance sales (deposit advance on the harvest), for harvest sales, for post-harvest sales?
- What are markets for crop sales like? Consignment? Farm gate prices and options? Auctions? Competition? Holding and storage? Transportation? (Get details on crops, and sale price ranges – harvest and post-harvest, averages)
- What is the cash flow of their household like on an annual basis? What are the difficult periods? What are the high cash periods?
- Have they ever taken a loan from an organization – an NGO, community organization, microfinance organization? What was their experience? What do they think of borrowing?

- Do most farmers in their community have a cell phone? Do they own or have access to a cell phone?

**Questions for traders, input suppliers and processors:**

Warm up conversation and introductions: the drought, business climate, their business history in general, the purpose of our visit, our background, interests and farming experience:

Questions: **SPECIFIC VALUE CHAIN FINANCE INFORMATION**

Value chain actor	Value chain finance specific questions
Producer	<p>Have you ever purchased any agricultural inputs or services on credit? From whom? What were the terms (i.e. interest rate or higher price)?</p> <p>Have you ever received any trade credit from buyers or traders? (advance payments, inputs on credit etc.) What are the terms?</p> <p>Do you ever sell their produce on credit to buyer? What are the terms?</p> <p>Any experience with in-kind repayments?</p> <p>What is your level of satisfaction, any complaints, or challenges?</p>
Input supplier / service provider	<p>Do you offer any agricultural inputs or services on credit? What are the terms (i.e. interest rate or higher price)?</p> <p>Who do they offer credit to and why? What % of sales are on credit?</p> <p>Do you receive any supplier credit? If so from whom and what are the terms? What % of purchases are on credit?</p> <p>General perception of small producers as potential credit customers?</p>
Small buyers / traders	<p>Do you offer advance payments, working capital loans, or any inputs on credit to producers? What are the terms? What percentage of their suppliers can access this from them? Do you purchase on consignment? Who pays for storage? What percentage of the sales are export? What percentage domestic?</p> <p>Do you accept in-kind or cash repayments?</p> <p>Do your customers or suppliers offer producers any trade credit? What are the terms?</p> <p>Your general perceptions of small producers as potential credit customers?</p>
Processors / lead firms / large buyers	<p>Do you offer any advance payments, working capital loans, inputs on credit or other credit arrangements to their suppliers (producers?) What are the terms? What is the profile of suppliers who qualify for these credit arrangements?</p>

<b>Value chain actor</b>	<b>Value chain finance specific questions</b>
	Do you have any experience with formal contract farming or “out grower” schemes?  Their general perception of small producers as potential credit customers.
Producer cooperatives / producer groups	None interviewed, very nascent in sector

## APPENDIX 5 – BALKH AND KUNDUZ SME PROCESSORS SURVEY (AREDP/ MRRD)



Filters:

### Detailed SME Report Balkh and Kunduz Provinces

#	Province	Company Name	Type of Business	Type of Assets	Value of Assets
163	Balkh	Akbar boy fish pond	fish pond	1500 fishes	0
				Premises	
164	Balkh	Eidy Mohammad carpet weaving	Carpet weavers	Machinery	130000
				Premises	
165	Balkh	Haji Abdul Qadir poultry form	Poultry	Machinery	765000
				Premises	
166	Balkh	Haji Khairullah oil and soap production	oil production	Machinery	5000000
167	Balkh	Nowshad ice making	Ice	Machinery	1570000
				Vehicles	
168	Balkh	Khalid Safi ice production	Ice	Furniture	6100000
				Vehicles	
169	Balkh	Nawi Aria ayodin salt production	Salt	Furniture	5430000
				Vehicles	
170	Balkh	Aimal Shahzada hina production	Henna	Machinery	2350000
				Premises	
171	Balkh	Ghazanfar vegetable processing and growing	vegetable oil production	Furniture	11750000
				Premises	
172	Balkh	Said Daud beverage production	Beverages	Machinery	0
				Vehicles	
173	Balkh	Maiwan Balkh ice making	Ice	Machinery	6100000
				Vehicles	
174	Balkh	Brothers ice production	Ice	Furniture	5010000
				Vehicles	
175	Balkh	Cola production	Beverages	Machinery	2125000
				Vehicles	
176	Balkh	Usmani ice making	Ice	Machinery	235150000
				Vehicles	
177	Balkh	Mohammadi tile and stone production	Tile making	Furniture	2555000
				Vehicles	
178	Balkh	Sahadat oil and soap production	oil production	Furniture	6600000
				Premises	
179	Balkh	Afghan Nawin tile production	Tile making	Machinery	140000
				Premises	
180	Balkh	Hakim Khan oil production	oil production	Furniture	0
				Premises	
181	Balkh	Ghulam Habib oil and soup production	oil production	Furniture	18610000
				Vehicles	
182	Balkh	Mashal plastic production	Plastic making	Machinery	975000
				Vehicles	
183	Balkh	Abdul Nabi Akram Zada oil production	oil production	Furniture	0
				Vehicles	
184	Balkh	Sorat Zada marble production	Marbles	Furniture	50000
185	Balkh	Qais Sameer box production	box production	Furniture	0
				Machinery	
186	Balkh	Yousuf Nabi carpet washing and weaving	carpet washing	Furniture	0
				Vehicles	

187	Balkh	Ali Haseem production	Tissue Paper	Furniture	9040000
				Vehicles	
188	Balkh	Mawlah Ali tile making	Tile making	Machinery	0
				Premises	
189	Balkh	Mayel Karim	Bakeries	Furniture	0
				Premises	
190	Balkh	Kabul kam company	Candy making	Furniture	0
				Vehicles	
191	Balkh	Baz Mohammad oil and ice production	Ice	Furniture	3030000
				Vehicles	
192	Balkh	Ghorbandwal plastic	PVC Pipes	Furniture	0
				Premises	
193	Balkh	Waheed Nasir Saadat Tomato Paste Production	Tomato Paste	Furniture	9025000
				Machinery	
194	Balkh	Wali Mohammad medical herbs processing	Medical Herbs Processing	Furniture	9850000
				Vehicles	
195	Balkh	Kamya bayat industrial company		Furniture	1250000
				Vehicles	
196	Balkh	Afghan mohibi industrial company	Water Tanker	Furniture	0
				Vehicles	
197	Balkh	Sina P.V.C pipe production	PVC Pipes	Furniture	0
				Premises	
198	Balkh	Kamal team carpet weaving	Carpet weavers	Furniture	1750000
				Vehicles	
199	Balkh	Jamil Khalil oil and soup production	oil production	Machinery	250000
				Premises	
200	Balkh	Darya boteek company	plastic pipe	Furniture	0
				Vehicles	
201	Balkh	Haji Sharif oil making	oil making	Machinery	3500000
				Premises	
202	Balkh	Shad meer	Candy making	Furniture	0
				Vehicles	
203	Balkh	Beverage and food production	Beverages	Furniture	150000
204	Balkh	Balkh bastan tile making	Tile making	Furniture	260000
				Machinery	
205	Balkh	Akhter Durukhshan plastic	Plastic making	Machinery	1250000
206	Balkh	Mehdi Ameer production	Plastic making	Machinery	1600000
207	Balkh	Aria mazar production	Plastic making	Furniture	1350000
				Machinery	
208	Balkh	Baqaa plastic	plastic shoes	Machinery	3000000
209	Balkh	Firoz plastic	plastic shoes	Furniture	250000
				Machinery	
210	Balkh	Basir plastic	plastic shoes	Machinery	2000000
211	Balkh	Karez production	Sandals	Machinery	5000000
212	Balkh	Corper plastic		Furniture	3060000
				Machinery	
213	Balkh	Sahar plastic shoes production	Plastic making	Machinery	200000
214	Balkh	Bahar plastic	shoes for male and female	Furniture	2550000
				Machinery	
215	Balkh	Aimal Roshan plastic	Sandals	Furniture	1270000
				Machinery	

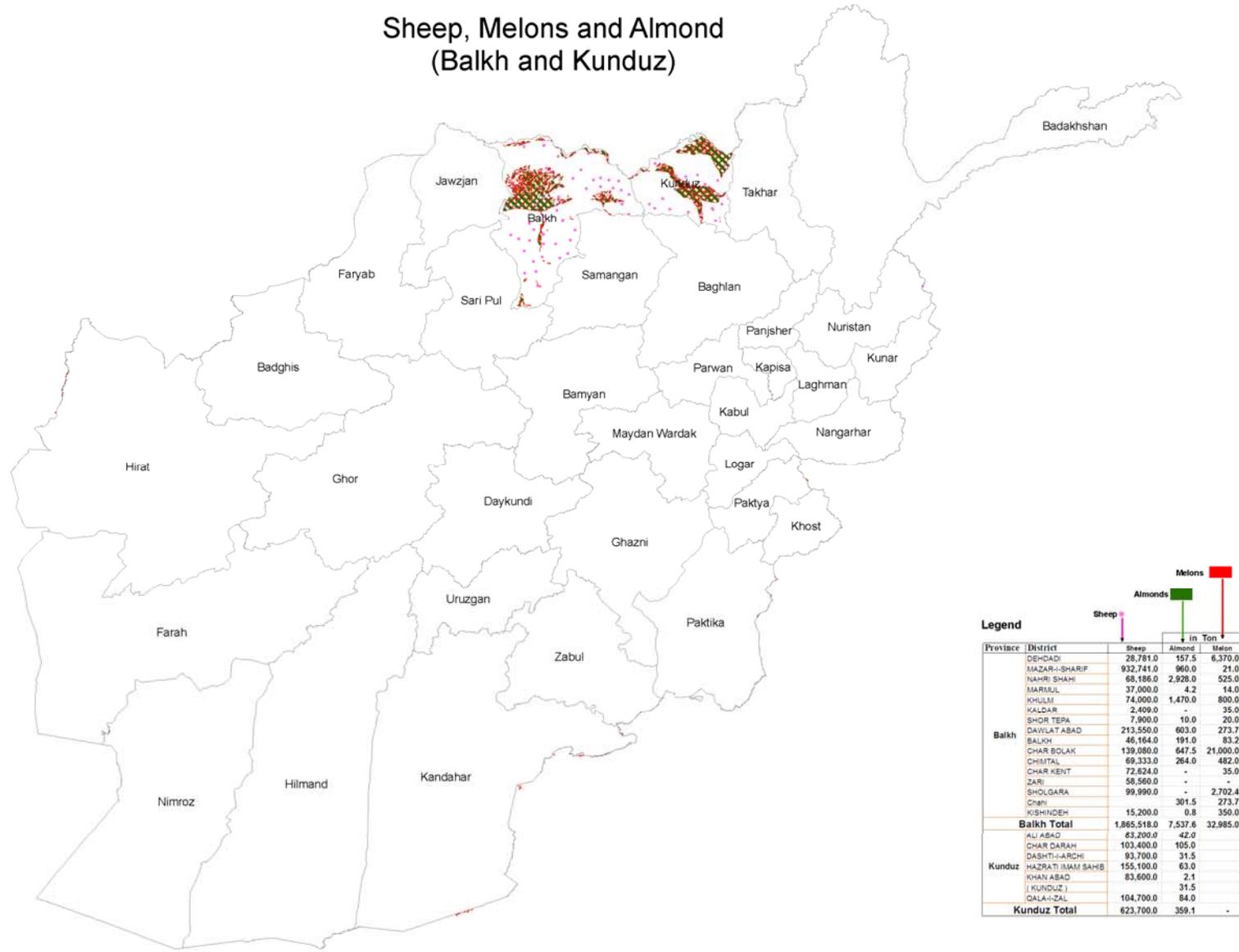
216	Balkh	Pamir plastic	Sandals	Furniture	1550000
				Machinery	
217	Balkh	Behzan Shamsi Ltd	oil production	Furniture	310000
				Premises	
218	Balkh	Kaaj Rafa battery acid production		Furniture	260000
				Machinery	
219	Balkh	Nawi kawsar production	oil and battery acid	Premises	20500000
				Vehicles	
220	Balkh	Safa beverage production	Beverages	Machinery	1025000
				Vehicles	
221	Balkh	Zarafshan production	Beverages	Furniture	1675000
				Vehicles	
222	Balkh	Yaqob Mohibi tanker production	Water Tanker	Furniture	3950000
				Premises	
223	Balkh	Tahte Rustem stone cutting	Stone Decoration	Machinery	5050000
				Vehicles	
224	Balkh	Ray sabz ball making factory	Sports	Machinery	5020000
				Premises	
225	Balkh	Afghan carpet weaving company	Carpet weavers	Machinery	100300000
				Premises	
226	Balkh	Ali Mohammad	Carpet weavers	Machinery	800000
				Premises	
227	Balkh	Nawin tiles making	Tile making	Furniture	2510000
				Vehicles	
228	Balkh	Rasteen t	Toilet paper	Furniture	21300000
				Machinery	
229	Balkh	Babur Kawsar company	fresh fruit water production	Premises	5000000
230	Balkh	Arozo oil production	oil production	Furniture	0
				Machinery	
231	Balkh	Mohammad Omar oil production	oil production	Machinery	9000000
				Premises	
232	Balkh	Nasruddin company	oil production	Machinery	0
				Premises	
233	Balkh	Haji Abdul Rahman oil and soap production	oil production	Machinery	50000000
				Premises	
234	Balkh	Malem Naeem oil making	oil making	Machinery	2750000
				Premises	
235	Balkh	Sakhi Nazar production	Beverages	Machinery	35000
				Vehicles	
236	Balkh	Parasto company	Basket Makers	Furniture	34050000
				Vehicles	
237	Balkh	Shirzad plastic production	Plastic making	Machinery	700000
				Vehicles	
238	Balkh	Itehad Jawidan food production	Bakeries	Furniture	15501000
				Vehicles	
239	Balkh	Watan plastic production	Plastic making	Furniture	1000000
				Machinery	
240	Balkh	Baidak Sharif brothers carpet string production	carpet string	Furniture	26000000
				Vehicles	
241	Balkh	Raqeeb Plastic	Sandals	Machinery	250000
242	Balkh	Jawed intestine processing	intestine process	Premises	700000
				Vehicles	
243	Balkh	Sanaye Zada oil production	oil production	Machinery	12500000
				Premises	
244	Balkh	Bilal Bais tile making	Tile making	Furniture	2000000
				Vehicles	

245	Balkh	Tolo Balkh tile production	Tile making	Machinery	0
246	Balkh	Afghan electric	electric wire	Furniture Vehicles	35275000
247	Balkh	Wais Samim company	PVC Pipes	Furniture Machinery	4550000
248	Balkh	Ana Wakil carpet weaving and washing	Carpet weavers	Furniture Premises	11010000
249	Balkh	Sorat zada flour mills	Flour Mills	Furniture Vehicles	137550000
250	Balkh	I.I.Food production company	Bakeries	Furniture Vehicles	5850000
251	Balkh	Mohammad Tahir Bakhteri carpet weaving live stock	meat and dairy	Machinery Premises	0
252	Balkh	Habibiullah live stock form	meat and dairy cotton and qara qul	Machinery Premises	0
253	Balkh	Abdul Nabi Fish form	fish form	Machinery	200000
254	Balkh	Almobaser production factory	Bakeries	Furniture Vehicles	2150000
255	Balkh	Abdul Basir Carpet Weaving	Carpet weavers	Machinery Vehicles	6500000
256	Balkh	Hasib Milad Plastic Ltd	Plastic making	Machinery	750000
257	Balkh	Dawlad tile production	Tile making	Machinery	0
258	Balkh	Abdul Bashir poultry form	Poultry	Machinery Premises	0
259	Balkh	Qamaruddin poultry form	Poultry	Machinery Premises	0
260	Balkh	Mohammad Qayum live stock		Machinery Premises	0
638	Kunduz	Gulab Naqil Dairy	Dairy	Premises	600000
639	Kunduz	Abdul Rasool Kochi Dairy	Dairy	Premises	400000
640	Kunduz	Gul Alam Dairy Form	Dairy	Premises	50000
641	Kunduz	Noor Mohammad Carpet Weaving Center	Carpet weavers	Machinery	1200000
642	Kunduz	Mohammad Yousuf Carpet Weaving	Carpet weavers	Machinery	200000
643	Kunduz	Faizullah Carpentry	Carpenters	Machinery Premises	260000
644	Kunduz	Haji Bismillah Agricultural Equipments Production	Agricultural Equipment Production	Machinery Premises	620000
645	Kunduz	Qumandan Sahib Abdul Qayum Dairy	Dairy	Premises	2000000
646	Kunduz	Tahira Carpet weaving center	Carpet weavers	Machinery	518000
647	Kunduz	Abdul Mateen Dairy	Dairy	Premises	1500000
648	Kunduz	Imam Gul Handicrafts	Handicrafts	Machinery	48000
649	Kunduz	Ghulam Rabani Poultry	Poultry	None	0
650	Kunduz	Abdul Ahad Fish Pond	Fish Pond	Premises	14000000

651	Kunduz	Orta Bulaqi Poultry	Poultry	Premises	250000
652	Kunduz	Abdul Shukoor Carpet Weaving and Coloring	Carpet weavers	Machinery	1700000
				Premises	
653	Kunduz	Pekai Tailoring Center	Tailoring	Machinery	520000
				Premises	
654	Kunduz	Abdul Rahim Dairy	Dairy	Premises	1200000
655	Kunduz	Abdul Wakil and Sons Tiles Company	Tile making	Machinery	400000
656	Kunduz	Pashtun Gul Tailoring Center	Tailoring	Machinery	15000
657	Kunduz	Haji nabi khan Ice Production	Ice	Machinery	6250000
				Vehicles	
658	Kunduz	Murgh Dari Abdul Qadir	Poultry	Premises	1000000
659	Kunduz	Haji Amir Mohammad Carpet weaving and washing center	Carpet weaving and washing	Furniture	9050000
				Premises	
660	Kunduz	Abdul Hameed Poultry From	Poultry	Machinery	640000
				Premises	
661	Kunduz	Fayaz , Hassan Zada Toilet paper Factory	Toilet Paper	Machinery	7000000
				Premises	
662	Kunduz	Watan Tiles	Tile making	Furniture	1415000
				Machinery	
663	Kunduz	Habib-ul-Rahman Dairy	Dairy	Premises	1100000
664	Kunduz	Ustaad Allah Nazar PVC pipes production	PVC Pipes	Machinery	200000
				Premises	
665	Kunduz	Kalukh Tepa Carpet weaving center	Carpet weavers	Machinery	650000
666	Kunduz	Abdul Rashid Medical Herbs Processing	Medical Herbs Processing	Machinery	215000
				Premises	
667	Kunduz	Haji Asadullah cow and fish pond	fish pond	Machinery	1800000
				Premises	

## APPENDIX 6 – ARIES CROP PRODUCTION MAPS – BALKH and KUNDUZ

Sheep, Melons and Almond  
(Balkh and Kunduz)



**Legend**

Province	District	Sheep	Almond	Melon
			in Ton	
	DEHDADI	28,781.0	157.5	6,370.0
	MAZAR-I-SHARIF	932,741.0	960.0	21.0
	NAHRI SHAHI	68,186.0	2,928.0	525.0
	MARIJUL	37,000.0	4.2	14.0
	KHULZI	74,000.0	1,470.0	800.0
	KALDAR	2,409.0	-	35.0
	SHOR TEPA	7,900.0	10.0	20.0
	DAWLAT ABAD	213,550.0	603.0	273.7
	BALKH	46,164.0	191.0	83.2
	CHAR BOLAK	139,080.0	647.5	21,000.0
	CHIMTAL	69,333.0	264.0	482.0
	CHAR KENT	72,624.0	-	35.0
	ZARI	58,560.0	-	-
	SHOLGARA	99,990.0	-	2,702.4
	CHAPI	-	301.5	273.7
	KISHINDEH	15,200.0	0.8	350.0
	<b>Balkh Total</b>	<b>1,865,518.0</b>	<b>7,537.6</b>	<b>32,985.0</b>
	ALI ASAQ	83,200.0	42.0	-
	CHAR DARAH	103,400.0	105.0	-
	DASHTI-JARCHI	93,700.0	31.5	-
	HAZRATI IMAM SAHIB	155,100.0	63.0	-
	KHAN ABAD	83,600.0	2.1	-
	(KUNDUZ)	-	31.5	-
	GALAH-DAL	104,700.0	84.0	-
	<b>Kunduz Total</b>	<b>623,700.0</b>	<b>359.1</b>	<b>-</b>

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